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STUDIES IN CHARACTER.

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DR. KOCH.

ROBERT KOCH—the name is the German equivalent of our own homely Cook—was born at Klausthal, on the Western or Hanover slope of the Harz mountains, December 11th, 1843. His father, the scientific superintendent of a Government mine, had the boy educated at the gymnasium, or superior grammar school of the place, which, in 1862, was exchanged for Göttingen and the study of medicine. Both at the grammar school and the university young Koch was a patient student rather than a quick or a brilliant one. Having acquired an early taste for reading in those lonely Klausthal mountains, where the winter is severe and outdoor sport very much restricted for six months in the year, he came to Göttingen well prepared for his task by knowledge already amassed and habits of thoughtful industry, fostered by a careful and intelligent parent. Nor were the mining associations of his early years thrown away upon the meditative youth. In those parts miners are a peculiar people. If mediæval traditions, which formerly made the German miner a servant of God combating demons of the subterranean deep, have gradually died out in modern days, a serious composure of thought and act resulting from centuries of mystic craft is still the prevailing characteristic of the old Bergmann of the land. While your modern coal burrower is a navvy, here, as everywhere, the metal digger in the old mines of Germany, where art and skill

are required, is a gentleman amongst labourers, in knowledge as well as behaviour. With these worthies the boy was fond of spending his leisure hours underground or in the smelting works and chemical laboratories attached to the large scientific establishments of the place. The multiplicity of metals excavated in the Harz—which, it is well known, is a perfect epitome of mineralogy—and the run he had of the furnaces made him speedily acquainted with the elements of chemistry, the higher grades of which he was subsequently destined to turn to such good account. In conformity with the racial genius of the country, and more particularly of the province to which he belonged, he formed the habit of untiring application, even before he left school. Like many a German household, where every day brings its allotted work and every evening the gratifying sense of duty thoroughly fulfilled, the quiet *ménage* at Klausthal reared a boy whose heart was in his books, and who cared little for anything else.

German scientific distinction in these latter days largely arises from the dominant tendencies of modern research being peculiarly at one with the best intellectual qualities of the race. Specialist work, which has become the immediate exigency of the times, is a line wholly congenial to the Teutonic mind. There was little excitement in Robert Koch, as he passed for the first time the rickety gate of the mean-looking university buildings at Göttingen, aged nineteen, but there was a profound addiction to detail and a rare capacity for unravelling it by close observation from surrounding phenomena. There was the ordinary national talent for exact particulars, and there was a sustained glow which, if but favoured, might lead the self-possessed youth a long way, and which, if his diligence should go unrewarded, would at least secure him intellectual delight of a cherished description, and the consciousness of having done his best. It was the beginning of a German student's life, very much like many others. Apart from the boy's unusual power of consistent work, there was no very visible prospect of anything beyond a useful, unpretending life, such as falls to the lot of thousands of similarly situated young men.

But the Fates, who had been propitious in giving him a robust understanding, proved equally beneficent in providing an excellent

teacher. At Göttingen he had the good fortune to fall in with a professor, who, in the first term he attended lectures, gave his studies the direction they never left until the great consummation of a few weeks ago. From the very outset there was no groping in the dark, no vain-spent hours, the bane of many an inquisitive mind. He had a goal plainly pointed out to him, and he was the man to tread the laborious way that led up to it, with untiring feet, for years and years. Professor Hente, who taught anatomy and physiology in the Alma Göttingensis, was perhaps the first to accentuate in his books and lectures the probability of infectious disease arising from the spread of microscopic organisms. The seed sown by the intelligent man fell upon a grateful soil. As optics and chemistry had by that time sufficiently developed for the research recommended, Koch, with many others, no doubt, set to work at once. Where he surpassed competitors was in the unremitting continuance of his work for many years to come and the resolve to achieve in one way what could not be done in another. While duly acquainting himself with the different branches of his profession, his companions remember him occasionally talking of infectious animalculæ and endeavouring to hunt for them with crucible and glass. But the chase proved altogether unproductive in those early days, and the immediate necessities of his career did not admit of its being very hotly proceeded with. When leaving the university amid the thunder of the Seven Days' war, which expelled Austria from Germany and put an end to Hanoverian Royalty, Koch, a competent young doctor by that time, was firmly determined to go on with his experiments, whether they led to anything or not, but was altogether unable to say where and when. In any case, he was deeply convinced that his investigations would eventually mature a valuable result, and, *ad utrumque paratus*, according to his wont, left it quietly to the future to show whether he or somebody else was to win the palm. This is the utmost that can be said of his expectations in 1866.

A burly young man, above middle height, with a countenance remarkable from its depth of expression and strength of contour, he had all life before him and his fortune to make. He next wended his way to a great Hamburg hospital. Having practised his art for

a year in that famous institution, he settled in a small town of his native province, whence he soon migrated to another town in primitive Posen, where a doctor was wanted and few would care to seek the post. In these small beginnings, as in so many other respects, his career was modelled on the usual German pattern, and may serve as a good specimen of a truly national type. His father had been a professional man in the Government service, with a moderate salary, scant wealth, and hard intellectual work. The son, whether he accepted a public appointment or not, could not expect any very different mode of life. Modest wants, indeed, might earn him a tardy independence, but for enjoyment and pleasure he would have to look to his mental and moral resources during the whole of his life. On the course of the somewhat Spartan existence which Germany assigns to most of her professional sons, Dr. Koch shortly after wandered to another Posen hamlet, this time in the capacity of *Kreis Physicus*, or County Physician to the Law Courts. To eke out a respectable income he remained a private practitioner as well. On many a Polish winter night, jolting in a Polish rural car, along a Polish country road, the indefatigable man would drive about to look after a coughing child or an expiring boor, having previously torn himself away from his books to render what assistance he could, and earn what little fee he might. A serious unostentatious, and dutiful man throughout, he, in this and in every other part of his career, commanded the respect of his fellow citizens, without, however, eliciting any very ardent feelings in his behalf. He never spoke much, though his actions might always be relied on. He never displayed a tendency nor, indeed, a wish to shine, though he certainly was a proficient in the rarer art of doing good. Night and day, in sick room and hospital, he had little time to devote to the society of his equals, and in that half Slavonic province was certainly more popular as a doctor than as a visitor or a host.

In 1876, ten years after he had quitted the university, and about fourteen after he had ceased to be a grammar-school boy, Koch took the first step towards publishing the results of his persistent inquiries. He had been labouring as assiduously as he could all the time, but not wishing to prematurely draw attention to his

researches, had hitherto kept his discoveries to himself. But Professor Ferdinand Cohn, of Breslau University, a well-known botanist, publishing a paper on the bacteriological origin of the Murrain disease, brought him to the front. On a sunny afternoon in May, 1876, the Posen *Kreis Physicus* rang the bell at the Breslau Botanical Institute, and, finding Professor Cohn at home, informed him of his own investigations as to the origin and spread of Murrain. The Professor perceiving that his own investigations were quite thrown into the background, if what his visitor stated were correct, with the generous enthusiasm of a true follower of science, invited the applicant to demonstrate his method and results before a chosen circle of colleagues. During the next few days Professors Ferdinand Cohn, the botanist; Ludwig Cohn, the pathologist; Cohnheim, the oculist; Auerbach, the anatomist; Weigert, the physiologist; and Lichtheim, the physicist—all of them curiously enough Jews, like Hente, the first teacher of Koch—repeatedly met at the Institute to attend the lectures Koch had consented to give them. At the termination of the third lecture there was a storm of applause. The learned conclave were in accord as to the extreme importance of the discovery they had been invited to listen to. Murrain had been proved to be the consequence of miscroscopic germs, and the germs that brought on the disease had been bodily presented to the vision of the delighted audience; the way to see and mark them had been undeniably shown; the method of ascertaining their effect upon living organisms had been positively exhibited. The bacilli, in fine, a hybrid race, wavering on the confines of the animal and vegetable world, had been generated, educated, and set to work upon the intestines of rats, guinea-pigs, and other harmless animals, the unconscious victim-assistants of the great doctor in his long, unceasing toil. After all, like so many great discoveries, this was a simple one. All previous attempts at discerning the bacilli in the animal frame having failed, it had occurred to the persevering investigator to dye the infected parts in the hope that the added colour would produce a different effect upon the decaying organism, and the living animalculæ that flourished upon the havoc they wrought. This shrewd hypothesis was fully borne out by the ultimate result. After many futile endeavours, he hit upon a

dyeing matter that separated the tainted flesh from the aggressive worm, and, optics happily combining with chemistry, finally displayed the diminutive tiger to the armed eye. More than that. When he had caught the bacillus at last, he succeeded in placing the creature upon some nutritious gelatine upon which the animal was able to breed and multiply, and so supply the investigator with numberless specimens for further experiment and control. It was here that the rats came in and, duly inoculated, were called upon to die a scientific death for the benefit of mankind. In the course of numerous trials, the bacillus and its pernicious activity were fully exhibited. All this being properly explained to the erudite council at the Botanic Institute, wonder, applause, and exultant hope were shown by the assembled professors. Clearly, if one infectious disease was brought on by invisible denizens of the air, why not all? A new path was plainly opening up to the seat of malady in its most insidious form, and, with it, the prospect of a cure.

More Germanico, however, the effect upon the scientific world was anything but quick. When the promising discovery had been duly registered in Cohn's botanical periodical, the professorial world began to digest the thing with its usual composure and sceptical delay. A few papers were written and opinions exchanged without producing much of an impression. Upon the whole, opposite views prevailed at first, and could only be silenced with trouble and time. While those committed to different theories had to be defeated in debate, the choir with habitual assurance ignored the soloist as long as they could. Meanwhile, Koch had to return to his village practice, to look after the ailments of the Polish peasantry for four years more. It was not until 1880, after the publication of some other successful essays on his favourite theme, that the Breslau professors, who had originally befriended him, managed to get the discoverer appointed to a chair in the Berlin University and a seat in the Imperial Council of Health. With metropolitan laboratories and plenty of able assistants suddenly placed at his disposal, Koch, whose efforts had so long been carried on with his two unaided arms and the slender purse of a rural practitioner, continued his investigations with redoubled zeal and success. In 1881 he traced the tubercle bacillus, which discovery was to cover him with glory later on. In 1882

he proved scrofula, lupus, and fetid inflammation to be caused by the like agency. In 1883 he proceeded to Egypt and India, and, with his official assistants, showed cholera to be similarly brought about by another species of the same class. That putrescence consequent upon wounds originates in bacilli of yet another variety had been demonstrated by him even while at his agricultural retreat of Wollstein.

The professorial sportsman who had ferreted out the bacilli in their lair was not the sort of individual to sit down contentedly before the den and let the savage occupants carry on their ravages unmolested inside; from the very outset he tried to kill the beasts he had trapped. The tubercle bacillus was the first he took in hand. But if to ensnare the animal, which had eluded the chase from age to age, had been an arduous task, the problem of destroying it proved yet more difficult; at least, the problem of destroying the animal in the living body it preyed upon without destroying its prey as well. It was, indeed, easy enough to kill any bacillus artificially hatched by simply withdrawing the food that had generated it; but if you had to deal with it in the human frame, you could neither separate the bacillus from the sufferer to whom it clung, nor poison it without poisoning the patient as well; or rather, without poisoning the patient long before slaying the worm, the smallest and most imperfect organism presenting an incomparably greater power of resistance to all manner of venomous matter than the human form. Methodical in everything, Koch had no sooner established the latter fact than he determined to devote his efforts to the former contingency alone: if the bacillus could not be destroyed, while an inmate of the human frame, the only means of vanquishing the untoward visitor obviously consisted in effecting a dislodgment. In a Sanitary Council Memoir, issued in 1886, he avowed his failure to kill; in the memorable statement just inserted in the Berlin *Medical Gazette* he proclaims his triumph as regards ejection. The medicine he instils causing infected parts to corrode and quit the body, the enemy is removed along with the *débris* it has produced.

In the incipient stages of the disease the cure is rapid and, so far as can be known at present, complete; whilst in more advanced

cases the bacillus seems to possess the capacity of either transferring itself from infected to uninfected parts yet inaccessible to the medicine, or else the organism is too thoroughly enfeebled to exclude fresh arrivals from outside. As the same medicine cures caries, consumption, lupus, scrofula, and other forms of tuberculose disease, all these are considered to proceed from an identical bacillus. The numerous cures already announced by Berlin physicians leave no doubt as to the efficacy of the antidote in lighter affections. This—as there is no reason why lighter affections should be allowed to increase before being treated—virtually amounts to the possibility of universal cure and extirpation of the disease. Thus far the nature and composition of the medicine is a secret, and the stuff is to be obtained from the inventor alone. It appears that Dr. Koch intends to direct and supervise its manufacture and application for the present. With all the Berlin hotels full of consumptive people, he supplies his phthisical medicine as fast as he can produce it. Ever active, he is even now engaged in searching for analogous means to combat the cholera bacillus. There seems to be no reason why his first success should not be repeated.

Comment is unnecessary. Even if the new departure should be restricted to tuberculose disorder, no giant-killer ever conferred a benefit upon mankind that can at all compare to the one bestowed by the conqueror of the smallest foes in existence. Hundreds of thousands of valuable lives will be saved every year from premature death. Millions will be spared the sickening sight of seeing their beloved ones decline and fade away in their early youth.

Having obtained his glorious results by long methodical application, rather than brilliant thought, and having won the laurel in the unpretending path of a very ordinary career, Dr. Koch is considered a truly national hero, and praised accordingly on all hands.

"IN DARKEST ENGLAND."

IF I accede to the request that I would say a few more words on the recent proposal set forth in General Booth's book, I do so because I have never seen any social scheme which filled me with warmer hope. Acting entirely on my own responsibility, I have not shrunk from taking such steps as might seem most likely to further this project. My action in so doing has brought me many letters, some from clergymen, whose names are entirely unknown to me, and others from that class of persons which indulges itself by writing anonymous criticism. But other Churchmen, of position far above mine, have written to Mr. Booth in the same warm tones of sympathy and approval, among them some of the highest personages in the land. The Prince of Wales has expressed his interest in the proposal. The Duke of Fife has contributed £100 towards it. Many of those whose names are most honourably associated with philanthropic work have publicly or privately declared their conviction that the leader of the Salvation Army has furnished the outline of a plan of social amelioration which, if he be provided with the requisite funds, may produce large and blessed results. The interest in this matter has spread through all classes of society. Mr. Bancroft has very nobly offered the sum of £1,000 if ninety-nine other persons will make the same offer, and his generosity has elicited the generosity of others. Organisations of working men have written to express their gratitude for an effort in which they see unusual elements of hopefulness for the elevation of the poorest of their class. Cardinal Manning, by his letter to General Booth, has once more set the example of that large-hearted tolerance, and of that quick sympathy for the downtrodden and the despair-

ing, which has given to the Roman Church a new interest in the minds of thousands. The Dean of Llandaff has not hesitated to support the effort with his mature wisdom. Not a few of our Bishops—among them the Bishops of Durham, Lincoln, Rochester, and Bath and Wells—have spoken, in general terms, indeed, but in a way which manifests an unequivocal desire that the scheme should be attempted and should prove to be a blessing; while the Bishop of Manchester, with characteristic manliness and courage, has given his reasons for believing that society is hereby furnished with an unwonted opportunity for the alleviation, if not for the remedy, of immemorial wrongs, and has emphasised his approval by the donation of £100. For myself I can only say that the censure of some is as nothing in comparison with that voice of disapproval which would have filled my conscience if I had shrunk from rendering my insignificant aid to an effort which, if it fulfil our hopes, will inaugurate an epoch of social amelioration hardly less important in its own sphere than that religious awakenment which is connected with the names of John Wesley and George Whitefield.

It is but right that the scheme should be searchingly criticised by those who are convinced that it must fail. Some may prophesy its failure for no better reason than that such a fate has attended previous plans of beneficence. The promoters of many a sincere and noble endeavour have been compelled to exclaim with Isaiah: "We have, as it were, brought forth wind; we have not wrought any deliverance in the earth." But to all who sink into apathetic acquiescence of existing wrongs out of mere despair, I would say that no sincere endeavour for the welfare of mankind has ever failed entirely or finally, and such schemes have often been quickened into life out of apparent death. In any case, I ask with the Dean of St. Paul's, in a sermon preached some years ago, "Shall we, then, sit still with folded hands, idle and hopeless, because, in this time of our mortality, the chances of failure are so formidable; because men so often disappoint us and we disappoint ourselves, and good causes seem to fail and come to nothing by the folly and slackness of their friends? Shall we, like the servant the parable, bury our talent and forbear our service because of

the severity of its terms? There can be no failure worse than that. While we are here . . . God, our Master, sends us forth not to succeed, not to make our mark, not to conquer, but to work—to work, it may be, to be defeated. We know by the highest of all examples that one of the ways by which God accomplishes His purposes is the way of what seems irretrievable disaster. . . . It is easy to over-estimate the meaning of a success and to exaggerate a failure. Fear and indolence and impatience and despondency are quite as false counsellors as hope."

There are some who loudly assure us that the plan of General Booth is, in its very nature, nugatory; and others who declare, no less loudly, that it will be positively pernicious. If such be their conviction they are, of course, absolved from the duty of supporting this proposal, and we shall carefully weigh any arguments which they can adduce in favour of their view. And if, again, any be inclined to say, we are already engaged in the earnest endeavour to promote other schemes of good which absorb our energies and our power of giving, they have a perfect right to the choice of fitting objects for their own charity. All that we venture to urge is that the candid and the munificent should not be misled by mere prejudices from lending their aid to a plan of which the avowed and entirely unsectarian aim is to bring hope and help, and some sense of human brotherhood, to the most wretched of the outcast, the helpless, and the despairing.

I may assume that every serious reader of this paper has already made himself acquainted with the main landmarks of the "way out" of Darkest England as indicated by General Booth. I wish now to state, in the simplest possible manner, some of the reasons why it seems to me that it will be little short of a national calamity if the means are not forthcoming to render it possible for this great experiment at least to be tried upon an adequate scale.

I. The first of these reasons is the indisputable existence of a vast and terrible amount of squalor, vice, crime, destitution, and misery. Is there any man in England with powers of observation so obtuse as to deny this fact? or with a heart so "brased by damnèd custom" as to think that he has absolved himself from all duties respecting it when he has stigmatised every reference to it

as "sensational," and every scheme of grappling with it as "Utopian," and every attempt to call attention to the necessary remedies as a vain and egotistical self-advertisement? Even in these days it remains true that half the world does not know how the other half is living. Those of us whose duties have taught us to see things as they are—are we to remain silent, or never to take any public part in the efforts at improvement which can alone save England from enormous perils in the future, because, if we come forward, it is so certain that almost everything we do will be misrepresented, and everything we say distorted and misunderstood? The crime and misery are at our doors. My own parish only numbers some four thousand souls, and no street in it is now inhabited by a directly criminal population. Every house and room of the poor is constantly visited; it has two mission-halls, besides the church, in constant and daily use; it enlists the aid of many Christian workers, and has some twenty-five different agencies and societies and institutions exclusively occupied in the endeavour to benefit and bless its poor. And yet the plainest and most unvarnished tale of life histories which constantly occur among its lowest tenements would make the blood of some run cold, and should at least be sufficient to silence all the airy and fastidious objections which crowd around every beneficent proposal. If we multiply by tens of thousands the misery, pauperism, and want in so small and so thoroughly supervised an area, we shall be able to form some faint conception of the deadly evils which stagnate under the iridescent film of our surface civilisation. Or, take the test of statistics. Is it, then, a mere bagatelle that in London alone there are, at the lowest computation, nearly a million souls who grade down from the rank of the very poor to those of the paupers, the homeless, the starving, the criminal, and the outcast? Let me offer a single test. Expend twopence on a startling and ghastly pamphlet which has been occasionally published by the United Kingdom Alliance. It deals with but one curse—though that is the monster-curse which, like Aaron's rod, swallows up all others—the curse of drink. It is not any matter of argument, or fad, or "teetotal fanaticism," but simply a bare and unvarnished list of the villainies and horrors which have in various years occurred in

England in consequence of drunkenness in the single week between December 24th and January 1st. It is merely a pamphlet of paste and scissors, where, in the most prosaic manner, are collected the records of criminal justice during that week of what we usually regard as religious festivity. Its facts, therefore, are absolutely undeniable, and cannot be exaggerated. Yet from John o' Groat's house to Land's End it shows that drink alone yearly causes in the midst of us deeds of gruesome horror and vileness which would disgrace many a heathen community. Is it enough to dismiss these facts with a wave of the hand? Have we nothing more to do respecting them than to win such reputation for smartness and insight as may be derived from the repetition of a threadbare epigram?

> "Can such things be,
> And overcome us like a summer's cloud,
> Without our special wonder?"

II. And, secondly, the truth must be spoken at all costs. The Church—by which I mean, in the definition of our Articles, all the congregations of faithful men wherein the pure Word of God is preached and the sacraments are duly administered—has so far not succeeded in applying any radical and fundamental remedy to this deplorable state of things. It works for the most part parochially, and the sum total of its parochial work is most beneficent; but what we now need is a more general and organised effort. Do not let it be basely and ungraciously said that in admitting a fact which has been stated thousands of times by the Bishops and clergy of the Church of England, and the leaders of our Nonconformist bodies, in their own pulpits and on their own platforms, I am overlooking or minimising the work of the Church. She did, indeed, lose vast areas of her proper territory amid the torpor and worldliness of the seventeenth and eighteenth centuries; but her present difficulties are due, not only to this neglect in the past, but also to the increase in geometrical progression of the poorest of our population, and especially to the stupendous growth of our great cities. At this moment the Church is rousing herself to a sense of her duties with an energy which has never been surpassed. We might almost say of her, in the words of Milton, that she

is "Mewing her mighty youth, and kindling her undazzled eye at the noonday beam." I should hold myself to be inexcusable if I said one word to underrate the humble self-denying devotedness of thousands of her brave and patient clergy, or the faithfulness beyond all praise with which they are spending and being spent in heroic efforts to bring Heaven a little nearer to our earth. So far from ignoring their efforts, I have tried to assist them in Hoxton, Bethnal Green, Whitechapel, Spitalfields, St. George's-in-the-East, Stepney, the Oxford House, Toynbee Hall, Barking, the Pembroke College Mission, the Trinity College Mission, the Marlborough College Mission, and many similar scenes of effort. I know well what the Church does, and I also know well what, as yet, she has been unable to do. The clergy should be the first to admit—and, if I had space to adduce the evidence, I could show that they have again and again admitted—that they are, with all their efforts, so thwarted by difficulties hitherto insuperable as to be unable in many quarters to do more than touch the ulcerous place, and that vaster efforts are still needed to cleanse the whole body, which is so full of wounds and bruises and putrefying sores. The best part of our work—and it is noble and necessary work—is pastoral, not aggressive. It retains the allegiance of the faithful, it does not effectively win back the masses of the indifferent, or on a large scale reconquer the alienated and the hostile. Too much of our labour is remedial, not preventive. It deals with, and sometimes does but drive inwards, the dangerous symptoms. It is a temporary alleviation, not a radical cure. How can we rest content with our work when in many parishes, even in London, the Church has been compared, not to a ship with her sails set, but to a "dismantled hulk upon the rolling waters"? and when it is universally admitted that over immense areas, both of cities and of the country, not 10 per cent. of the working men attend any place of religious worship, and not 3 per cent. care to partake, in any form, of the Holy Communion?

And what are we to say of the unemployed? They number some 60,000 in London alone. Anyone who has watched the heart-breaking struggle at the gates of the dockyards may realise the horror of great darkness in the hearts of multitudes who try in

vain for regular work, and living in the anguish of chronic destitution—

"Die so slowly that none call it murder."

Men of experience consider that the numbers of the unemployed will more and more be swelled by the overcrowding of necessitous clerks, and the struggle for life among the lower middle classes. Scarcely a week passes in which men—often sick and weak and emaciated and ragged—do not come to my door from the hospitals, the prisons, or the common lodging-houses, and ask me to get them work. Are we not entirely helpless to give effectual aid to such cases? How can we get them work? And what can we do for them? If we give them food we allay a few hours' hunger. If we give them money the chances are very great that a maddening temptation will drive them straight to the public-house. Such remedies are always useless, and often pernicious, and as yet the provisions for better remedies are partial in their range and almost infinitesimal in their operation. Three incidents which have come before me this very day illustrate my contention. A working man in my parish applying at the small Bureau of Labour in Thames Street, and applying several times, can get nothing more than a ticket numbered 4,004. Another unemployed labourer, who is in very weak health, walks all the way to Woolwich on the rumoured chance of a job, and walks back unsuccessful, arriving at his wretched home at three o'clock in the morning. Twenty-six working men, all of them with starving families, send me a joint letter to tell me of their unavailing efforts, and to implore that aid in finding them employment which it is impossible for me to render.

Here, then, we have two decisive facts. On the one hand, a deplorable waste of splendid human material, and a drifting away into the darkness of souls for which Christ died; and on the other, no thorough, no decisive, no concentrated, no coherent, no largely organised endeavour to plunge down to the very depths of the turbid ocean and rescue the perishing, to dig down to the very roots of the social distress and stub up their bitter fibres. And this is why some of us have welcomed with eager hope a proposal which, if duly supported, may help towards a larger, wider,

and more systematic deliverance of the helpless and the outcast than any which has yet come under our notice, or which has come with such credentials as offered any reasonable prospect of wide success.

Let us now turn to the dense crop of objections which have sprung up around this proposal. Some of them are weak and ephemeral—

> "As in the autumn woods,
> Where all trees used to flourish, from their roots
> Spring up a fungous brood, sickly and pale
> White mushrooms, coloured like a corpse's cheek."

One need hardly stop to appease the susceptibilities of those who feel themselves injured by our giving the technical title of General to a man who is the recognised head of an army of myriads —a title which was freely conceded to the General of the Jesuits. And what earthly bearing on the question has the assertion that, in drawing up his book, General Booth was aided by a literary hand? Were the facts adduced by John Howard *less* facts because they were thrown into shape by Jeremy Bentham? These criticisms I shall neglect, as well as those which spring from intolerance or self-interest. I pass over the jealousies of rival philanthropists. Many letters have reached me from persons who all clamorously persist that the plan is theirs; that they had been devising it all before; or that they were already on some tiny scale trying to carry it out, or that they can suggest something better. Of all such I say that questions of priority of suggestion in matters of philanthropy seem to me as absolutely uninteresting and unimportant as small literary attempts to prove that Dante or Milton or Shakespeare plagiarised from this or that obscure romance. The world may be ignorant of its greatest deliverers, but we can only deal with those whose efforts become known to us. *De rebus non apparentibus et non existentibus, eadem est ratio.*

But it is urged—

I. That this scheme will injure the work of the Church of England.

With the entire strength of my conviction I maintain that, on the contrary—unless we meet it with alienated sympathies and

bitter opposition—it will aid the whole life of the Church of England; will enable her to lengthen her cords, and strengthen her stakes; will be the cause of bringing back many lost sheep to her fold; will awaken to some sense of their need for the truths and blessings of Christianity, multitudes who at present know her not, and have never called upon the name of Christ. I am assured, on the best authority, not only that the movement is fundamentally social, and disconnected from any special religious organisation, but also that the Salvation Army is no longer hostile, if ever it was supposed to be hostile, to the work of our National Church. The Church of England, in the person of many of her accredited representatives, looked with a frown of anger and even of hatred on the humble emissaries of Wesley and Whitefield; yet she now acknowledges that she herself has gained incalculably from the religious revival which those humble emissaries were privileged to cause. Let her learn wisdom from the errors of the past; let her learn to say with William Penn that the meek, the just, the pious, the devout, are all of one religion; let her not turn coldly away from anyone who is doing the work of mercy, even if he be a Samaritan and a heretic, nor rail at anyone who is casting out devils, even if he followeth not after us.

II. But it is said the money given to General Booth's scheme will be withdrawn from other agencies which are now doing excellent work.

I feel sure that, on the contrary, the success, or even the partial success, of this scheme will give a powerful stimulus to all branches of philanthropic effort. It will diminish the at present enormous area of their labours, and will, therefore, render those labours more effectual. I do not think so ill of my fellow countrymen as to imagine that the gift of a paltry £100,000 to enable this great experiment to be tried will dry up the river of English charity. Rather I believe that its waters will become broader, deeper, and more fertilising. The plain fact is that the Church of England has not yet sufficiently taught her sons—especially her wealthy sons—to give. There is not a sect, however poor, which does not give more largely and systematically in proportion to its means than the great mass of the members of our own

communion. The few give nobly; the many give meanly or not at all. The mere fact that the Salvation Army, a sect of yesterday, now raises something like £800,000 a year to a large extent from the contributions of its poorer members, shows how much more it would be possible for us to do. We must break down more and more effectually the pernicious delusions that the care of the poor is the duty of the clergy, and that no one is bound to contribute more than a chance minim to the charities and spiritual maintenance of his parish. It would be indeed a frightful satire on our niggardliness if we were compelled to admit that the contributions towards a sum so small—a mere drop in the vast ocean of our national wealth—would exhaust our charitable resources and inclinations. The estimated annual expenditure of London is £200,000,000 a year. "To state the annual income on which Income-tax is paid in the United Kingdom at £650,000,000," says Mr. Gladstone, "is, I am convinced, to state it moderately." An addition of a single halfpenny to the Income-tax—and surely there are few who could not for a purpose of widespread amelioration mulct themselves so far by a voluntary gift—would produce £1,025,000; more than ten times over what is now required. We could give millions of pounds without a groan for petty wars against Abyssinia and Ashantee, for results comparatively insignificant; cannot we spare the merest fraction of those millions to rescue from the pit of misery so many myriads of our fellow citizens? If I am not mistaken, Mr. Carnegie's paper on "The Gospel of Wealth," and Mr. Gladstone's remarks on it in the *Nineteenth Century* of last month, are destined to produce a great awakening of conscience in many minds, and the ultimate swelling of our poor charities from a trickling rill to a veritable Pactolus. At present, though they might seem large absolutely, they are very small relatively. The *quantum* dwindles into insignificance when it is judged by the *ex quanto*. Mr. Bancroft's offer of £1,000 if ninety-nine others would give the same, might be met, not by ninety-nine, but by many thousands of men in England, without the abandonment on their part of a single luxury in their boundless superfluity. Is it not, then, idle to suppose that the gift of a sum so trivial will deplete the charitable

resources of the wealthiest nation in the world? On the contrary, many who have been awoke from the deep slumber of immoral acquiescence by the discussion of General Booth's proposals will, I am convinced, be led to contribute all the more generously to all the home and foreign missions of the Church of England, and to increase the scanty funds of scores of excellent but struggling charities.

III. A third objection is one which needs serious consideration It is that this scheme will increase the multitudes of worthless tramps and paupers who flock to London, when they think that anything is to be obtained. Those who urge this objection confidently dwell on the analogy of the Mansion House Fund and other great charitable contributions which helped, in their opinion, to recruit the ranks of a lazy and immoral mendicancy. But the analogy is unreal. In the present scheme, *work and discipline* are offered, not alms. It is made an indispensable condition of assistance that each person in the Workshops, in the Farm Colony, in the Colony beyond the Sea, should labour, and should obey orders. If not, they will no longer receive either food, shelter, or wages. There may be a residuum of idle and worthless men, too drunken, degraded, and dehumanised to accept such conditions. But they will be subjected to a decisive test. Meanwhile there are unquestionably multitudes of the unfortunate to whom the hope of continuous work and the possibility of regaining self-respect would be a paradise on earth. Besides this, it is intended that similar schemes should be started in many centres, and if many of the hopelessly vicious remain unreclaimed—as they do now—on the other hand many of the unfortunate will make an effort to save themselves from the untoward conditions by which they are being destroyed, and will be drafted off into sweeter surroundings and purer air.

IV. But, fourthly, it is objected that General Booth's method rests on a complete absolutism, and that, therefore, it must fail. I ask, Why? The word "absolutism" seems to be invidious, but in reality the proposer of the plan only requires *concentration* to carry it out, and, from those who voluntarily accept its benefits, a free obedience to the necessary conditions on which the boon is offered them. Society has always been aided and purified in the first

instance by individuals, not by committees. I agree with the witty remark of a practical Nonconformist preacher, that the best committee is often a committee of three, two of whom are ill in bed. So far from "absolutism" of the beneficent kind always failing, I believe that it is often the sole secret of success. Many a general, besides General Booth, has won victories by being unhampered, which he never would have won if he had been checked at every turn by the wavering and contradictory judgments of a committee. The beneficent commencement of the work of the *Fratres Minores* was started exclusively by St. Francis of Assisi, and the success of the Jesuits in carrying out their special aim was due mainly to the autocracy of Ignatius Loyola, and of each succeeding General of his Order. Methodism in its early days did a glorious work among perishing thousands. Would its work have been so successful without the presiding and independent genius of its founder? General Booth has offered to undertake an immense and needed work. Unless we are to refuse confidence in him altogether, we must leave him to organise it in his own way.

V. But, lastly, it is thought by many a fatal objection that this scheme has emanated from the Salvation Army. They think it a sufficient condemnation to ask, "Can any good thing come out of Nazareth?" I cannot share this view. In 1882, preaching in Westminster Abbey, I called attention to the moral and religious dangers which might shipwreck this movement which was then comparatively in its infancy. Respecting some of their methods, and many of their opinions, I still entertain this misgiving. Nevertheless, in times like these it does not do to be over-exquisite in emphasising defects of system, or crudities of theology. The Salvation Army has, beyond all question, saved many souls. It has, I am sure, rescued quite as many drunkards and harlots from their abyss of misery as any of those who write to assure the world that it has done no good. It has, in Jeremy Bentham's phrase, uplifted multitudes from the bottomless pit of humiliation, and first taught them that they could be something. Springing up, as it were, in a night, it numbers (it is said) some two million followers; it has, all over the world, more than three thousand centres of operation; it has twelve thousand regular

officers, many of them young men in all their youthful hope and energy, who, for the very humblest salaries, are gladly spending themselves and being spent in doing the work of evangelists. The rescue of the fallen, the inspiring of hope into lost souls, the transformation of the felon, the outcast, and the blasphemer from shame to self-respect, the conversion of many from being the curses of society to be "profitable members of the Church and the commonwealth, and hereafter partakers of the immortal glories of the Resurrection"—these, surely, are most blessed works; and for the sake of them I will tolerate drums and tambourines, and poke bonnets and oddities of nomenclature, and methods which may seem coarse to the cultured but which are potent with those to whom they are applied. Let two testimonies suffice: "*The Salvation Army*," said Bishop Lightfoot, "*has at least recalled to us a lost secret of Christianity, the compulsion of human souls.*" "*Compare what they do with what we have done*," said Canon Liddon, after attending a Salvation meeting. "*It makes me ashamed. I feel guilty when I think of it.*"

And, to conclude, if dislike of the new sect repels us, ought it not to be counterbalanced by the fact that in this case they are proposing to help the nation in a social, not primarily and predominantly in a religious crusade; and that they bring with them not only remarkable credentials, but also a new and most effective organisation such as will be ready and able at once to undertake the mighty task? They already have a Labour Bureau; and thirty Refuges, which have saved hundreds of fallen women; and Shelters which have given a place of rest to many thousands of homeless men; and Food Depôts, thronged daily by multitudes of the indigent and the starving, who for a mere pittance can obtain a wholesome meal; and Workshops, where for food and shelter men gladly give a day of honest labour. If anyone will examine this work of the Salvation Army for himself he will see how large, how blessed, and how admirably ordered it is. He will also, if I may judge from my own experience, be specially struck with the brotherly gentleness and purely human sympathy shown by the officers of the Army, many of whom have once been poor and destitute and drunken themselves. When I was in the Food Depôt in Whitechapel, some

little vagrant children, dirty, ragged, repellent—poor waifs and strays of infancy, cast up amid the gross scum which chokes the outermost wave of our civilisation—came and begged of me. I shall never forget the delicate and tender kindness with which the officer who was with me patted these little ones on the head, and dealt gently and lovingly with them. The look and smile and kindly sympathy and gentle words were better than an idly-wasted gift to get rid of a troublesome importunity.

Much more might be said, but I will add this only. When we are looking out on a stormy sea, strewn with unnumbered shipwrecks, we do not stop to ask whether the men of the crew which is preparing to breast those fierce and cruel waves are Dissenters or Churchmen. With all our hearts we give them the best encouragement and the best aid which it is in our power to render.

As one who stands upon the shore
And sees the lifeboat speed to save,
And all too weak to take an oar—
I send a cheer across the wave.

F. W. FARRAR.

TWO NEWLY DISCOVERED PAPERS BY DE QUINCEY.

VERY recently a number of de Quincey's unpublished MSS. were, by a great piece of good fortune, discovered by Mrs. Baird Smith and Miss de Quincey. The following papers, the first of which is the missing "Suspiria de Profundis," have been selected from this mass of long hidden treasure. A further selection will be given in the January number of the NEW REVIEW.

I.

THE DARK INTERPRETER.

SUFFERING is a mightier agency in the hands of nature, as a Demiurgus creating the intellect, than most people are aware of.

The truth I heard often in sleep from the lips of the Dark Interpreter. Who is he? He is a shadow, reader, but a shadow with whom you must suffer me to make you acquainted. You need not be afraid of him, for when I explain his nature and origin you will see that he is essentially inoffensive; or if sometimes he menaces with his countenance—that is but seldom; and then, as his features in those moods shift as rapidly as clouds in a gale of wind, you may always look for the terrific aspects to vanish as fast as they have gathered. As to his origin, what it is I know exactly, but cannot without a little circuit of preparation make *you* understand. Perhaps you are aware of that power in the eye of many children by which in darkness they project a vast threatre of phantasmagorial figures, moving forwards or backwards between their bed-curtains and the chamber walls. In some

children this power is semi-voluntary—they can control or perhaps suspend the shows; but in others it is altogether automatic. I myself, at the date of my last Confessions, had seen in this way more processions, generally solemn, mournful, belonging to eternity, but also at times glad triumphal pomps that seemed to enter the gates of Time, than all the religions of Paganism, fierce or gay, ever witnessed. Now there is in the dark places of the human spirit, in grief, in fear, in vindictive wrath, a power of self-projection not unlike to this. Thirty years ago, it may be, a man called Symons committed several murders in a sudden epilepsy of planet-struck fury. According to my recollection, this case happened at Hoddesdon, which is in Middlesex. . . . "Revenge is sweet!" was his hellish motto on that occasion, and that motto itself records the abysses which a human will can open. Revenge is *not* sweet, unless, by the mighty charm of a charity that seeketh not her own, it has become benignant.* And what he had to revenge was—woman's scorn. He had been a plain farm-servant, and, in fact, he was executed, as such men often are, on a proper point of professional respect to their calling, in a smock-frock (or blouse, to render so ugly a clash of syllables). His young mistress was every way and by much his superior as well in prospects as in education. But the man, by nature arrogant, and little acquainted with the world, presumptuously raised his eyes to one of his young mistresses. Great was the scorn with which she repressed his audacity, and her sisters participated in her disdain. Upon this affront he brooded night and day, and after the term of his service was over, and he in effect forgotten by the family, one day suddenly he descended amongst the women of the family like an Avatar of vengeance. Right and left he threw out his murderous knife without distinction of person, leaving the room and the passage floating in blood. The final result of this carnage was not so terrific as it threatened to be; some, I think, recovered, but one, who did *not* recover, was unhappily a stranger to the whole cause of his fury. Now this murderer always

* See the story of the young soldier who told his officer, on having been struck by him, that "he would make him repent it." (Close of autobiographic sketch, "Infant Literature.")

maintained, in conversation with the prison chaplain, that as he rushed on in his hellish career he perceived distinctly a dark figure on his right hand keeping pace with himself. Upon *that* the superstitious, of course, supposed that some fiend had revealed himself and associated his superfluous presence to the dark atrocity. Symons was not a philosopher, but my opinion is that he was too much so to tolerate that hypothesis, since, if there was one man in all Europe that needed no tempter to evil on that evening it was precisely Mr. Symons, as nobody knew better than Mr. Symons himself. I had not the benefit of his acquaintance, or I would have explained it to him. The fact is, in point of awe a fiend would be a poor trivial *bagatelle* compared to the shadowy projections, *umbras* and *penumbras*, which the unsearchable depths of man's nature are capable under adequate excitement of throwing off, and even into stationary forms. I shall have occasion to notice this point again. There are creative agencies in every part of human nature, of which the thousandth part could never be revealed in one life.

. . . . . .

You have heard, reader, in vision which describes our Ladies of Sorrow, particularly in the dark admonition of Madonna to her wicked sister that hateth and tempteth, what root of dark uses may lie in moral convulsions, not the uses hypocritically vaunted by theatrical devotion which affronts the majesty of God that ever and in all things loves. Truth prefers sincerity that is erring to piety that cants. Rebellion which is the sin of witchcraft is more pardonable in His sight than speechifying resignation, listening with complacency to its own self-conquests. Show always as much neighbourhood as thou canst to grief that abases itself, which will cost thee but little effort, if thine own grief hath been great. But God, who sees thy efforts in secret, will slowly strengthen those efforts, and make that to be a real deed-bearing tranquillity for thyself, which at first was but a feeble wish breathing homage to *Him*.

In after-life, from twenty to twenty-four, on looking back to those struggles of my childhood, I used to wonder exceedingly that a child could be exposed to struggles on such a scale. But two views unfolded upon me as my experience widened, which took away that wonder. The first was the vast scale upon which the sufferings of

children are found everywhere expanded in the realities of life. The generation of infants which you see is but part of those who belong to it, were born in it ; and, make the world over, not one-half of it. The missing part, more than an equal number to those of any age that are now living, have perished by every kind of torments. Three thousand children per annum, that is 300,000 per century, that is (omitting Sundays) about ten every day, pass to Heaven through flames* in this very island of Great Britain. And of those who survive to reach maturity, what multitudes have fought with fierce pangs of hunger, cold, and nakedness! When I came to know all this, then, reverting my eye to *my* struggle, I said oftentimes, It was nothing! Secondly, in watching the infancy of my own children, I made another discovery—it is well known to mothers, to nurses, and also to philosophers—that the tears and lamentations of infants, during the year or so when they have no *other* language of complaint, run through a gamut that is as inexhaustible as the Cremona of Paganini. An ear but moderately learned in that language cannot be deceived as to the rate and *modulus* of the suffering which it indicates. A fretful or peevish cry cannot by any efforts make itself impassioned. The cry of impatience, of hunger, of irritation, of reproach, of alarm, are all different, different as a chorus of Beethoven from a chorus of Mozart. But if ever you saw an infant suffering for an hour, as sometimes the healthiest does under some attack of the stomach, which has the tiger-grasp of the Oriental cholera—then you will hear moans that address to their mothers an anguish of supplication for aid such as might storm the heart of Moloch. Once hearing it, you will not forget it. Now it was a constant remark of mine, after any storm of that nature (occurring, suppose once in two months), that always on the following day—when a long, long sleep had chased away the darkness, and the memory of the darkness, from the little creature's brain, a sensible expansion had taken place in the intellectual faculties of attention, observation, and animation. It renewed the case of our great modern poet who, on

* Three thousand children are annually burnt to death in the nations of England and Scotland, and chiefly through the carelessness of parents. I shudder to add another and darker cause, which is a deep disgrace to the present age.

listening to the raving of the midnight storm, and the crashing which it was making in the mighty woods, reminded himself that all this hell of trouble

"Tells also of bright calms that shall succeed."

Pain driven to agony, or grief driven to frenzy, is essential to the ventilation of profound natures. A sea which is deeper than any that Count Massigli* measured cannot be searched and torn up from its sleeping depths without a levantor or a monsoon. A nature which is profound in excess, but also introverted and abstracted in excess, so as to be in peril of wasting itself in interminable reverie, cannot be awakened sometimes without afflictions that go to the very foundations, heaving, stirring, yet finally harmonising; and it is in such cases that the Dark Interpreter does his work, revealing the worlds of pain and agony and woe possible to many, possible even to the innocent spirit of a child.

II.

THE LOVELIEST SIGHT FOR WOMAN'S EYES.

THE loveliest sight that a woman's eye opens upon in this world is her first-born child; and the holiest sight upon which the eyes of God settle in Almighty sanction and perfect blessing is the love which soon kindles between the mother and her infant—mute and speechless on the one side, with no language but tears and kisses and looks. Beautiful is the philosophy . . . which arises out of that reflection or passion connected with the transition that has produced it. First comes the whole mighty drama of love purified† ever more and more, how often from grosser feelings, yet

* Count Massigli (an Austrian officer, in the Imperial service), about sixty years ago fathomed, and attempted to fathom, many parts of the Mediterranean and the Atlantic. If I remember rightly he found the bottom within less than an English mile.

† How purified? And if it should be answered, through and under Christianity, the fool in his heart would scoff and say: What woman thinks of religion in her youthful courtship? No; but it is not what she thinks of, but what thinks of her; not what she contemplates in consciousness, but what contemplates her, and reaches her by a necessity of social (? ideal) action. Romance is the product of Christianity; but so is sentiment.

of necessity, through its very elements, oscillating between the finite and the infinite; the haughtiness of womanly pride, so dignified, yet not always free from the near contagion of error; the romance so ennobling, yet not always entirely reasonable; the tender dawn of opening sentiments pointing to an idea in all this which it neither can reach nor could long sustain. Think of the great storm of agitation and fear and hope through which in her earliest days of womanhood every woman must naturally pass—fulfilling a law of her Creator, yet a law which rests upon her mixed constitution; animal, though indefinitely ascending to what is non-animal; as a daughter of man, frail . . . and imperfect, yet, also as a daughter of God, standing erect, with eyes to the heavens. Next, when the great vernal passover of sexual tenderness and romance has fulfilled its purpose, we see, rising as a Phœnix from this great mystery of ennobled instincts, another mystery much more profound, more affecting, more divine—not so much a rapture as a blissful repose of a sabbath, which swallows up the more perishing story of the first; forcing the vast heart of female nature through stages of ascent; forcing it to pursue the transmigrations of the Psyche from the aurelic condition so glowing in its colour into the winged creature which mixes with the mystery of the dawn and ascends to the altar of the infinite heavens; rising by a ladder of light from that sympathy which God surveys with approbation, and even more so as He beholds it self-purifying under His Christianity, to that sympathy which needs no purification, but is the holiest of things on this earth, and that in which God most reveals Himself through the nature of humanity.

Well is it for the glorification of human nature that through these changes the vast majority of women must for ever pass; well, also, that by placing its sublime germs near to female youth, God thus turns away by anticipation the divinest of disciplines from the rapacious absorption of the grave. Time is found, how often! for those who are early summoned into rendering back their glorious privilege, who yet have tasted in its firstfruits the paradise of maternal love.

And pertaining also to this part of the subject, I will tell you a result of my own observations of no light importance to women.

It is this. Nineteen times out of twenty I have remarked that the true paradise of a female life, in all ranks not too elevated for constant intercourse with the children, is by no means the years of courtship, nor the earliest period of marriage, but that sequestered chamber of her experience in which a mother is left alone through the day, with servants, perhaps, in a distant part of the house, and (God be thanked!) chiefly where there are no servants at all; she is attended by one sole companion, her little first-born angel, as yet clinging to her robe, imperfectly able to walk, still more imperfect in its prattling and innocent thoughts, clinging to her, haunting her wherever she goes as her shadow, catching from her eye the total inspiration of its little palpitating heart, and sending to hers a thrill of secret pleasure so often as its little fingers fasten on her own. Left alone from morning to night with this one companion, or even with three still wearing the graces of infancy, buds of various stages upon the self-same tree, a woman, if she has the great blessing of approaching such a luxury of paradise, is moving—too often not aware that she is moving—through the divinest section of her life. As evening sets in, the husband, through all walks of life, from the highest professional down to that of common labour, returns home to vary her modes of conversation by such thoughts and interests as are more consonant with his more extensive capacities of intellect. But by that time her child (or her children) will be reposing on the little couch, and in the morning, duly as the sun ascends in power, she sees before her a long, long day of perfect pleasure in this society which evening will bring to her, but which is interwoven with every fibre of her sensibilities. This condition of noiseless quiet love is that above all which God blesses and smiles upon.

ARE OUR WARSHIPS SEAWORTHY?

I.

THE recent loss of H.M.S. *Serpent*, with nearly every man on board, has awakened considerable anxiety on the subject of the seaworthiness of the many ships of novel type which have been added to the fleet in recent years. Speaking in general terms, it may be confidently affirmed that there is no ground for anxiety or distrust in the ability of our naval constructors to build ships capable of contending with storm and tempest. Certain it is that the melancholy fate of the *Serpent* is to be attributed, not to a want of sea-going and sea-keeping qualities, but to some unexplained mistake in navigation. In a comparatively new and untried vessel, it may have been that the compasses were considerably in error. In the weather which had prevailed throughout the run from Plymouth to Finisterre there had been no opportunity of ascertaining by the usual observations the amount of local deviation. Another pregnant source of danger is to be found in the strong currents setting to the eastward, which are commonly experienced in approaching the north-west corner of the Spanish peninsula, and especially after heavy winds from the west. In the conditions in which the *Serpent* was being navigated, a large allowance for possible errors of the compass and set of current was the only means by which safety could have been ensured. We shall never know all the facts. If the commander and navigating officer of the *Serpent* had entertained the smallest apprehension that they were nearing a dangerous coast on a dark and boisterous night, when the far from efficient lights in the vicinity would certainly not be visible to the full range, the ship's head would have been turned

to the westward, and an offing would have been kept under easy steam until daylight. Enough has been said to show that the disaster, which has recently aroused the public attention, was due to causes altogether apart from deficiency in point of seaworthiness. The facts of the case, however, not being known to the general public, it may be opportune to pass briefly in review the recent construction for the navy.

In this connection it will be appropriate to observe that the main purpose for which almost all ships of war are built, that is to say, efficiency for fighting, necessarily conflicts with those other features and elements of design which are intended to secure the safety of the ship. In the day of battle—and battles at sea, in the future as in the past, will probably be fought in fine or moderate weather—fighting efficiency will be increased by reducing the height of freeboard, and thus offering the smallest possible target to the enemy. Weight of armament is another element of fighting efficiency, whether expressed in the numbers or in the individual power of the guns. Again, the guns will be more efficient in proportion to the height at which they can be carried above the water. All these are features tending to militate against seaworthiness. But in ships built for the purpose of war it has often been deemed advisable to make considerations of seaworthiness subordinate to those which relate to strength and power in the time of battle. It is obvious that it was the most powerful combination of fighting qualities, rather than the most perfect conditions of habitability and seaworthiness, which was kept in view in the American *Monitor*, with its upper deck nearly flush with the water. It was the same with the far more seaworthy and powerful development of the corresponding type, represented in the British navy by the *Devastation*. It is the same in the case of the latest additions to the French navy, the *Hoche*, *Magenta*, *Marceau*, and *Neptune*, with their low upper deck, four 52-ton guns, carried in two heavy turrets, and their four-storeyed central superstructure, bristling with the lighter breechloading and machine guns. Ships of the types under consideration may, it is reasonable to assume, pass through the heaviest gales in safety ; but they must be handled with prudence. It would be impossible to press them at speed in the condition of weather in

which the *Etrurias*, *Teutonics*, and *Cities of New York* are driven with safety at 18 knots an hour.

In all stages of naval history the constructors of ships of war have been hampered by the same conflicting conditions. It has never been possible, and it never will be possible, to combine the most perfect qualities of seaworthiness with the maximum of fighting efficiency. The picturesque battleships of the olden days, as exemplified by the *Great Harry* and her contemporaries, would certainly have been improved as sea-keeping ships by the removal of the lofty poops and forecastles on which were mounted the guns, carronades, and culverins which swept the decks of the enemy with destructive and effective fire.

In view of those all-pervading difficulties of the case which make the most successful design for the purposes of war never perfect, and, indeed, at the very best a compromise, it must be admitted that in the recent construction for the navy a high—it would, perhaps, be fair to say the highest attainable—measure of safety has been reached. It cannot be said that the Admiralty have shown any undue timidity or hesitation in sending ships to sea for a fair trial. The large fleets brought together for the manœuvres, which, so much to the advantage of the navy, have become an annual exercise, have included ships of every type. The most daring designs have been wisely put side by side with the most approved and well-tried types. The comparatively recent order, extending the trials of ships from the artificial conditions of the measured mile to ninety-six hours in open water, has been an innovation certain to be found most satisfactory and useful to the navy. Not only have the Admiralty sent their ships to sea, but they have had the wisdom to submit their performances to the criticism of the professional public, and the most competent and independent officers in the navy. Mr. White has been authorised to write papers for the Institution of Naval Architects. It is a judicious innovation, and has afforded the opportunity for much useful discussion.

At the close of the manœuvres of 1888, a Committee, consisting of Admirals Sir William Dowell, Sir Vesey Hamilton, now First Sea Lord, and Sir Frederick Richards, recently appointed to the command of the China Squadron, was appointed by the

Admiralty specially to report on "the behaviour and sea-going qualities of, or defects in, the new and most recently commissioned vessels." We cannot do better than reproduce the more important sections of their report. Taking, first, the latest types of first-class battleships, those of the *Admiral* class, of which six have been recently added to the navy, the Committee report that these vessels are good sea-boats. The principal defect which called for criticism was the deficiency of freeboard, especially in the bows. This defect, however, though involving a rapid reduction of speed when it becomes necessary or desirable to force ships against a head sea or swell, and inevitably causing much inconvenience to the crews, is not, as it was pointed out by Sir Edward Reed in the discussion at the Institution of Naval Architects, a cause of danger. "It is," said Sir Edward Reed, "too hastily inferred by men who see vessels of the *Admiral* class burying themselves completely forward and totally disappearing beneath the sea's surface, and underrunning a very large volume of water, that this is necessarily a bad thing. It is bad, we know, and we have just heard it is bad for steaming to some extent; but there is nothing affecting safety in the matter."

The observations of the Committee have not been disregarded, and in the latest designs for the battleships now in course of construction ample freeboard, both forward and aft, has been given. It will not be necessary to enter with any detail upon defects of design in the older vessels. The deficiency of freeboard, on which the Committee remark in the case of the *Admiral* class, is still more conspicuous in the *Conqueror* and *Hero*. These ships being armed with single turrets, it is certain that the type will not be repeated.

That those in charge of the constructing department of the navy fully concur in the view taken by the Committee is clearly shown in the observations by Mr. White in his paper on the manœuvres of 1889, read at the last meeting of the Institution of Naval Architects. Alike as a means of maintaining speed at sea, and as a condition both of habitability and comfort, the value of a high side is fully, nay, strenuously, insisted upon. Leading constructors of the French navy have consistently held that the low-

ness of freeboard which was accepted in our earlier turret-ships of the *Devastation* type was not compatible with the conditions essential, not merely to the comfort, but to the health of the crews of ships of war intended for ocean service.

It will be seen that with regard to our armoured navy there are no grounds for apprehension as to the seaworthiness of any ships which the Admiralty would include in an ocean-going squadron.

Of the armoured cruisers of the *Warspite* and *Orlando* types, of which we have fortunately no less than seven in the navy, there is nothing to be said on the point of seaworthiness but words of praise.

In this connection the present writer cannot resist the opportunity of reiterating a suggestion which has been strongly pressed in the pages of the *Naval Annual*. We have in the navy several ships described by Mr. White, and not in terms of exaggeration, as grand examples of the earlier ironclad period. The list includes the *Northumberland*, *Agincourt*, *Minotaur*, and *Achilles*, the *Warrior* and the *Black Prince*, the *Alexandra*, *Sultan*, *Téméraire* and *Hercules*, and the five ships of the *Audacious* class. These earlier ironclads are as sound in hull as on the day when they were launched. Their armour, though of less thickness than is found in later vessels, is spread over a proportionately larger area, and thus affords a better protection against quick firing guns, which would deal fearful havoc when directed on the large surface of unarmoured sides presented by ships of more modern design. It is too much the fashion to condemn these noble specimens of naval architecture as obsolete. The British Navy has a conspicuous advantage over its rivals in the possession of a numerous fleet of ships of exceptionally good sea-going and sea-keeping qualities, which, within a short space of time, and at a small expense in comparison with the cost of constructing new vessels of equal tonnage, could be brought up to the latest standard of naval requirements. With modern armaments, and more powerful and economical engines, the ships under discussion present types that it would be hard to improve upon for the defence of the British Empire and its trade in distant waters.

Having dealt with the armoured, let us turn to the unarmoured classes. The construction of fast cruisers has been pushed with

energy in recent years. Whether as the eyes of the fleet, or for the protection of commerce, there is urgent need for the multiplication of such vessels in great numbers. The later additions to the fleet include, in the larger classes, four ships of the *Arethusa* type and four of the *Mersey* type. Descending in tonnage, we have two *Medeas*, 2,800 tons, and three *Marathons*, 2,950 tons. Of the class to which the ill-fated *Serpent* belonged we had ten ships, including the *Fearless* and the *Scout*. The four ships of the *Blanche* class, 1,580 tons, complete the list of newly-built second and third-class cruisers actually or nearly ready for sea. Turning to cruisers built and completing we have a truly splendid fleet, including the *Blake* and *Blenheim*, 9,000 tons, the *Vulcan*, torpedo-depôt ship, 6,620 tons, and nine first-class protected cruisers, *Edgar* type, which may either be regarded as enlarged *Merseys* or reduced *Blakes*. Their displacement varies from 7,350 to 7,700 tons and their extreme speed is 19¾ knots. The second-class cruisers form a most important feature in the new programme on which the Admiralty are engaged. The vessels in construction comprise the *Barham* and *Bellona*, 1,830 tons, nine *Pearl* type, 2,575 tons (including five vessels for the Australian Colonies), twenty-one *Apollo* type, 3,400 tons to 3,600 tons, and three *Astrea* type, 4,360 tons.

Let us see what the Committee of Admirals had to say on the seaworthiness of the most recent cruisers engaged in the manœuvres, upon which they were called upon to report. Of the ships of the *Mersey* class they remark: "So far as experience was obtained during the manœuvres these vessels proved themselves good sea-boats. They are reported to be handy, to have steady gun platforms, and to be able to fight their guns longer than most ships. No important defects appear to have been developed in any of these vessels. . . . Of the *Arethusa* class it is reported by the captain of one of them that she is a good sea-boat, and that she 'steams well against a moderate head-sea and strong wind." The ships of this class were said to roll so heavily as to render accurate shooting in a sea-way difficult. Reduction of top-weight was recommended as a remedy, and it has been applied with little difficulty.

We now come to the vessels of the *Serpent* class, on which

attention is at this moment more particularly concentrated. The Committee of Admirals reported as follows: "Six vessels of this type were employed during the manœuvres of 1888. The officers lately in command of these vessels report that, from the limited experience gained as to their behaviour and sea-going qualities, "they appear to be good sea-boats, but would not keep up their speed in a head-sea, and, owing to the great weight in their bows, they pitch heavily. They are quick rollers, and consequently unsteady gun platforms." There can be no question that the armament of these vessels, which were of exceptionally light construction, with the view to the attainment of high speed, was overdone. That this is so has been fully recognised by the Admiralty. The vessels now in construction will be more lightly armed in proportion to their tonnage.

It will be seen that, in reviewing the most recent construction of unarmoured cruisers for the navy, there is no reason to be dissatisfied, from the point of view of seaworthiness, with the various types which have been produced. That all improvements which experience has suggested will be introduced in the ships now building we may be confidently assured. Mr. White's wise decision to embark in one of the ships engaged in the naval manœuvres of last year was a most practical step.

In his paper read at the Institution of Naval Architects, in March last, Mr. White embodied the conclusions to which he had been led by personal observation afloat. He was deeply impressed with the superiority of behaviour and fighting qualities possessed by the larger vessels as compared with the smaller. The increased weight, the increased length, both of these elements depending on displacement, had a most marked effect in improving the sea-going qualities. The opinions put forth in Mr. White's paper are exemplified in a practical form in the constantly increasing dimensions of the second-class cruisers now in construction. The first batch of second-class cruisers laid down by Mr. White, after he returned to the Admiralty in the important position which he now fills—and, it is but justice to add, that he adorns—were the two *Medusas*, 2,880 tons, and the three *Marathons*, 2,950 tons. In the next batch of cruisers designed by Mr. White, aiming at the same speed, retaining the same horse-

power as in the *Medusas*, viz., 9,000 indicated horse-power, and practically with the same armament, Mr. White advanced to 3,400 tons. In the latest type of second-class cruisers, the *Astrea* class, with the same horse-power and speed, and without increase in the weight of armament, we find the displacement increased to 4,300 tons.

All seafaring men will rejoice at the new departure which has been taken at the Admiralty. There was a time when the idea prevailed that the more guns it was possible to cram into a ship the better her chance of victory in action. It was a tradition drawn from the experiences of the great war, when the weapons carried were, relatively to the structural strength of ships, much lighter than those with which our modern vessels are armed.

The writer cannot conclude this section of the paper without expressing admiration for the splendid skill in design we see displayed in the *Blenheim* and *Blake*. It is much to be regretted that when we had produced so truly noble a type we remained content with only two examples. While the *Edgars* will undoubtedly prove valuable additions to the navy, at least six ships of the *Blake* class would have been a most desirable reinforcement. Large as are the *Blakes*, they would not be found a ton too large if employed, where it is possible that their services might be urgently needed, in the defence of the great arterial line of communication between England and Australasia.

The most ticklish craft in the navy are, undoubtedly, the torpedo boats. When first introduced, too much was expected of the new weapons, and the phantom craft, of hitherto unprecedented speed, in which they were carried. It was clearly demonstrated by Sir Geoffrey Hornby's cruise on the west coast of Ireland, in 1885, that the torpedo boats of the earliest type, however valuable for the defence of estuaries and harbours, were not capable of cruising with a fleet. Since that not very remote date, we have advanced by rapid strides from boats 85ft. in length to the 100ft., 110ft., 125ft., 135ft., and 150ft. boats. It was early and clearly seen that for cruising purposes something far more powerful than the torpedo boat was necessary. This brought us to the torpedo gunboat. We began, not unsuccessfully, with the four torpedo gunboats of the *Rattle-*

snake class. In the report from which we have already so often quoted, the Committee of Admirals say: "From the communications received from the officers who lately commanded them, it may be assumed that, for the purpose for which they were designed, the *Rattlesnake* class are satisfactory sea-boats, and, provided they are handled with care, are safe vessels. Under all circumstances of heavy weather they seem to be extremely lively and to ship a good deal of water, except when steaming easy against the sea, or running at speed before it."

The *Rattlesnake* has been followed by a much larger type, in which the tonnage is advanced from 525 to 735 tons. With this increase of size it has been possible to add a lofty forecastle on the bows, which cannot fail to improve most materially the power of steaming head to sea, while adding greatly to the seaworthiness when laid-to under easy steam in tempestuous weather. In the torpedo flotilla, as it will be seen, we are gaining every year experience which must conduce to the safety of life, at least, in the ordinary peace service of the navy.

A few words seem necessary in answer to allegations put forward, without adequate sense of responsibility, to the effect that the recent construction of the navy is of a character to merit the opprobrious term of jerry-built. It is absolutely untrue to say that any vessels built for the navy are of inferior workmanship or materials, and this is what is implied when it is said that ships are jerry-built. All the materials supplied to her Majesty's yards are subjected to the most severe tests; the workmanship is of proverbial excellence. The construction for the navy in the private yards is of an equally high standard. It is subject to the closest supervision by resident representatives of the Constructive Department of the Admiralty, and as to quality of work it should merit the implicit confidence of the navy and the public.

In conclusion, it cannot be inappropriate, in a paper dealing with seaworthiness, to insist that when the utmost efforts of constructive skill have been put forward in building sound and seaworthy vessels, safety must ever mainly depend on the skill experience, and conduct of officers and crews. Many a flimsy craft has been brought safely through storm and tempest by good

seamanship. Nautical readers will not soon forget the thrilling narratives of Admiral Rous, of his early adventures in the frail coasters of the Mediterranean, in which wattled sheep-hurdles are often the chief defence for ill-protected decks against the sweep and rush of the sea.

Once more it must be acknowledged that the Admiralty have done well in instituting the naval manœuvres, the only criticism which can be offered being that they are of too short duration. To be early in life at sea, and to spend much time in troubled waters, will alone secure those qualifications of seamanship in the absence of which the best built ship is never safe. *Naviget hæc summa est*, is a primary maxim for the seaman.

BRASSEY.

II.

BY methods which are not altogether patent to the ordinary expert, the public on the first receipt of the news, connected the lamentable wreck of H.M.S. *Serpent* on the rocks near Cape Vilano with the question of her seaworthiness. Then, by an easy transition, it passed to questioning generally the seaworthiness of her Majesty's ships of modern type. It may be an interesting and not altogether idle employment to reply to these questionings shortly, from the point of view of that general knowledge and experience which fall to the lot of a naval officer who has served the usual time and in ordinary course.

But a word ought first to be said to disconnect the loss of the *Serpent* from any structural or mechanical causes. It was from the first almost impossible to connect any supposed defects in her hull or machinery with her running on the rocks at the particular locality named. All that could reasonably be said by way of connection was to assert that a stronger ship might have survived the shock. But there is really so very little difference between an exceedingly strong and an exceedingly weak ship when on exposed rocks in bad weather, that it would be useless to speculate on the supposition.

Passing to the general question of our warships' seaworthiness which has been raised, it will be evident that in a subject bristling with difficult technicalities it would be impossible for me to do more than put forward a very broad and superficial view in the few pages which are at my disposal. I think I shall best fulfil my object by offering to the readers of this REVIEW the *primâ facie* case as to the seaworthiness of our later ships, and showing whether obvious considerations tend to make them more and more, or less and less, seaworthy.

But I must explain that I propose to give to this term, seaworthiness, a rather wider scope of meaning than it commonly bears. Seamen use it to denote a ship of good behaviour in a sea-

way—it does not with them ordinarily connote anything beyond this, though sometimes it applies to the general state of a ship's hull when age or accident has thrown doubts on its soundness. I propose to extend the meaning of the term so as to embrace every quality which conduces to the convenience and security of a ship when navigating in the open sea.

Some three conditions contribute in whole or in part to render a ship liable to destruction by the winds and waves alone. Ships upset; they spring leaks, fill with water and sink in consequence; or they "ship seas," fill with water, and sink in that way. The springing of leaks at sea must generally be taken to arise from strains of some kind acting on a structure too weak to bear them. Violent motion tends to produce such strains, and therefore may become a secondary cause of the leak. A ship without control in a sea-way, dismasted, or with engines broken down, is more subject to violent motion than one which is under full command, hence defective locomotive power becomes a possible tertiary cause of a leak. It may become a secondary cause of a ship's taking in seas over all, and so filling and sinking; for loss of command of a ship in a sea-way tends to leave her more liable to ship seas, as well as to violent motion. This part of the question will be best understood by remembering the horror with which the centre of a cyclone has been regarded by seamen in sailing ships. It is calm in the centre of such a storm, but the terrible sea remains, and the ship, by reason of the calm, has to encounter it without locomotive power.

The point before us, then, is to inquire whether her Majesty's ships are becoming less or more liable to these mishaps? And as there have been several transitions of material, as from sail to steam, from wood to iron, and from iron to steel, we ought reasonably to expect variations in the tendencies as regards particulars, as well as general progress in one way or the other.

Her Majesty's ships have never been, as a rule, very liable to destruction in the open sea from causes which may be summarised under the term "unseaworthiness." From 1830 to 1855-6, I do not think there was a case of one of these ships capsizing, or foundering, or disappearing at sea. In the latter year, the *Nerbudda*, a 12-gun

brig, disappeared at sea near the Cape of Good Hope, and was supposed to have been upset by the wind. When in 1859 the *Heron*, a 12-gun brig, was upset in a squall, and sank on the west coast of Africa, it was held to be confirmatory of the supposition concerning the *Nerbudda*, and also to explain why the *Camilla*, a third 12-gun brig, which sailed in 1861 from a port in Japan, was never afterwards heard of. The most appalling disaster of all, the upsetting of the *Captain* in 1870, followed next in order of time; then came the upsetting of the unfortunate *Eurydice* in 1878, nearly as startling an occurrence as the loss of the *Captain;* and in 1880 a similar ship, the *Atalanta*, disappeared at sea. Of the more modern type of ships, the *Wasp*, in 1887, disappeared in the China Sea, leaving speculation rife as to what had happened to her.

Looked at by itself, this list of seven ships, presumably falling victims to unseaworthiness, is a black and a terrible one. Yet by comparison either with the number of ships voyaging, or with the numbers wrecked from causes other than those of unseaworthiness, the magnitude of the list shrinks. Again, of these seven ships the fate of three only is certain, and it is but by inference that the others are credited with like unseaworthiness.

With such facts before us, we may reflect that as the loss of these three ships was due to sail power, and as sail power has disappeared, we may be certain that one element of danger to our ships has disappeared with it. None of the new ships—all other things being equal—are liable to the accidents which befell the *Heron*, the *Captain*, and the *Eurydice*.

But it is a question proper to be asked, whether in the newer ships all other things do remain the same as before? and there is more in the question than at first appears. It is a remarkable fact connected with the behaviour of ships at sea that, speaking broadly, the more easily a ship can be upset, the more gentle are her motions in a sea-way. I can illustrate the matter by referring to the action of the metronome. In this instrument we decrease the rapidity of the beats by moving the sliding weight upwards, and so increasing its distance from the lower weight which forms the pendulum. In so moving the upper weight we raise the centre of gravity of the whole pendulum, and we also in-

crease its "moment of inertia," or make it less inclined to recover the vertical position when it is pushed out of it. It was discovered that it was the same thing in a ship. If the centre of gravity were raised, and the weights were dispersed above and below the centre of gravity, and the ship was caused to oscillate in still water, her "period" of oscillation, as it is called, would be slower. Such a ship, when placed in a sea-way, would have a motion more easy altogether than one whose period of oscillation was quicker. But just for this reason, and so far, such a ship was more liable to be upset.

For ages there had been a war in the navy against ships which had an uneasy and violent motion, and rolled heavily; and of course the strength of the structure was tried more severely in such a ship than in one which had a slight and gentle motion. When sea-gunnery rose to be a science, and good shooting became a primary constituent of naval force, there arose a cry for a "steady gun platform" as the thing most conducive to good shooting, which reached its maximum some twenty-three years ago. The naval architect of the day met it in the only way he could, by rather increasing the liability of the ships to be upset. But calculations were made, so that it was understood of ordinary ships that, with the sail area allowed them, there was an ample margin of stability. They had high sides, and the effect of high sides was to prolong the resistance to being upset until the ship was heeled over to an angle greater than there was force in any known wind to accomplish.

This process of gaining a steady gun platform by somewhat increasing ships' liability to be upset was in full swing when the loss of the *Captain* startled the whole world, and set naval architects everywhere at work to investigate, in a way that had never been done before, the entire question of the relations between resistance to being upset and motion in a sea-way. It was clearly seen that the upsetting of the *Captain* was due not so much to her want of resistance to being upset, as to the fact that from her peculiar form she began to lose power to resist after she had been pushed over to a comparatively small angle—some twenty-three degrees. The peculiarity of form was the low side, which let the water in upon the deck when she had been heeled to this small angle. The

high-sided ships remained, even though subject to great sail pressure, as safe as ever. In certain cases it was known that the thing had been overdone, and it was feared that in the *Invincible*, *Audacious*, and their class, the steady gun platform which they undoubtedly possessed were too dearly bought. They were ballasted for safety, but their steadiness at sea was preserved, and the remarkable behaviour of the *Audacious* in this way was noticed as one of the features of this year's manœuvres.

Probably no matter connected with the seaworthiness of ships has now been so fully studied as the relations between stability and steadiness. Before the removal of sail power, the limit within which liability to be upset could be increased in order to combine steadiness and safety was well understood, and, of course, the removal of sail power has taken away the only force which could upset a ship, and so has rendered the question less complicated than it was. This may be said to be the case with all the cruisers. They would be proof against being upset even if they had sail power. Without it, I believe I am right in saying that there is still a margin to work on, to produce a steadier gun platform.

It is not quite so with the battle-ships. The system of armouring into which naval architects were forced, or supposed themselves to be forced, by the advance of power in the individual gun, made it necessary to consider the state of the ships when large quantities of water were admitted through their wounds. In the result it was determined that they must be provided with a great excess of stability, and the *Inflexible*, *Edinburgh*, *Colossus*, and all the *Admiral* class are much more difficult to upset than their predecessors, such as the *Thunderer*, *Devastation*, and *Dreadnought*. But they have sacrificed much of the steady gun platform. The still later designs, by a different system of armouring, have, in a measure, avoided the necessity for this great reserve of stability in action; and by raising the height of the sides have extended the angle through which resistance to being upset works. The result is that the later types will be steadier ships at sea and yet not the least liable to be upset by any force that can be applied to them.

I pass now to the second possible element, namely, tendency to spring leaks. This also has become a danger of the past,

even if it were not shut out of account by the fact that even when men-of-war were built of wood they were not liable to this accident to any extent. Iron is tougher than wood, but I do not think when the change was made from the latter to the former that the limit of difference was exhausted. The iron structures turned out to be much stronger than the wooden ones. In like manner, now that steel has superseded iron, and is perhaps 30 per cent. tougher, I think it will be found that the steel ships are built as if steel were only about 15 per cent. stronger than iron, leaving with the steel hulls a margin of strength over the iron hulls, similar to that which was found in the iron over the wooden hulls.

I have pointed out that the cause of the leak is a structure too weak to stand the strains that are brought upon it. I think it is true that, quite apart from any desire to produce an extra strong ship for ordinary navigating purposes, the naval architects have been forced by the possible contingencies of a sea fight to produce extra strong ships, just as they were compelled in the case of the battleship to produce extra stable ships.

An iron ship, though generally stronger than a wooden ship, is locally weaker. A rock will go through a thin iron side which will not penetrate a thick wooden one. In like manner a steel ship, though generally stronger than an iron one, is locally weaker, because, to make an equally strong ship, the metal is everywhere thinner. But in steel there is a difference. A rock which will not penetrate a wooden bottom will penetrate and crack an iron one, but will bend in and crush a steel bottom without cracking it. Besides rocks, the contingencies of war are rams and torpedoes, as well as heavy shot or shell striking so near the water-line; so that a main feature in every design of an iron or steel warship must be its division into numerous water-tight compartments in order that if water does get in, either by the wounds of rocks or of war, it shall not spread about the ship. Every one of the divisions forming these compartments is in itself an addition to the general strength of the ship. In most of our cruisers there is a thick steel deck, curved in form, extending from one end to the other about the level of the water. This alone gives an immense additional strength. Both above and below this, and attached to it and to the

decks, bottom, and sides, are numerous walls or bulkheads, every one of which adds strength. I have heard it said that the real strength of a modern warship is contained in these additions, which are forced into her without any intention of giving strength, and yet cannot avoid giving it. So far, therefore, I believe we must say say that all the tendencies of modern warship building are such as to banish the idea of leaks, but, if such things should arise, to prevent them ever assuming the disastrous dimensions with which our forefathers were familiar.

The last branch of our inquiry as to structure, is whether our modern warships are more likely to ship seas than formerly, and to succumb in consequence?

In a general way the tendency to ship seas belonged to ships with either violent or uneasy motion, or to ships with low sides which did not "rise to the sea." I think that in two cases we are bound to say that the tendency of the modern warships to take in seas is greater than it used to be, yet in both the position is accepted and provided for. The first case is that of the battleship, which is, in fact, arranged on purpose that the water shall wash over her. But then the deck over which the sea breaks is made so staunch and so strong that the water simply rolls on and rolls off again without affecting the ship in any way whatever. Such a condition is distinctly an inconvenience to the crew, as it removes, in bad weather, the use of a whole deck for purposes of recreation and exercise. This is, without doubt, an objectionable feature, but it is surprising how easily men and officers get used to it, and how healthy such ships are. But it must be said, on behalf of the latest types of battleships, that the increased height of their sides will leave the upper deck habitable long after the water has taken charge of that of their predecessors.

The water is not expected to pass naturally on to the upper deck of the cruisers; and as they are designed, as I have described, to have an easier motion in a sea-way than their wooden predecessors there is no reason to suppose that they are, under ordinary conditions, more liable to take in water than these predecessors were. But the later cruisers have a power of driving against a sea that was never possessed by ships of their size before. If they are

so driven they are bound to ship seas. The fact is accepted in the designs, and extra provision is made for allowing the water which has come on to the deck to roll out again, while increased care is taken to prevent the water getting below at all.

When the unfortunate *Wasp* disappeared in Chinese waters there was, for a time, a strong feeling that a heavy sea had rolled into her which could not escape. It was ascertained, however, that there was better provision for its escape than had been usual. Notwithstanding, assurance has been made doubly sure, and in the most modern ships the proportion of "freeing scuppers" is greater than ever it was. In order to keep the water from going below, walls—called combings—surrounding the hatchways, which used to be but a few inches high, are now several feet. In this way, anyone examining the latest-designed ships can see for himself that if they are less seaworthy in any of the particulars mentioned than they used to be, it is in spite of the facts.

A word only is necessary to point out that the universal adoption of the twin-screw gives every ship a double chance of safety. Most twin-screw ships steam quite well with one screw, and when a modern warship suffers in her safety, or her convenience, from a breakdown of her engines, we may rely upon it that something very extraordinary indeed has happened. It must be understood when we hear of machinery "breaking down" on trial trips and so on, it is scarcely ever a complete breakdown that has happened. Indeed the broken-down ship usually shows how things are by steaming into harbour.

I think such a review as this, taken from a perfectly independent standpoint, ought, in some way, to reassure the public, and to convince them that it is hardly in the nature of things that our ships can be growing less seaworthy than they have always been.

P. H. COLOMB.

RETROSPECT OF THE RACING SEASON.

WHY there should be such great difference between the capacity of the best horses of their year in different seasons is inexplicable, seeing that the same stock is invariably drawn upon. The fact is so, however, and the flat race season that has just drawn to a close has been chiefly remarkable for the inferiority of its three-year-olds; nor, it must be added, are the younger horses animals of any remarkable promise; for the two-year-old running has been of a curiously in-and-out description, and this is an almost certain sign of bad animals. The weakness of the three-year-olds is very easily demonstrable through the performance of Amphion, who was not the best of his year, and is markedly behind Sheen, but quite as much in front of Memoir, Blue Green, Sainfoin, and Surefoot, as he showed so conspicuously at Ascot and Newmarket. Speaking first of the three-year-olds, since by them the so-called classic races are contested, no doubt Morion is the best colt of the year, and it was unlucky for Lord Hartington, his owner, that the son of Barcaldine and Chaplet was not entered in the Derby. Next to him I should be inclined to place Memoir, Blue Green, and Queen's Birthday, for the winners of the Derby and Two Thousand have shown themselves to be far behind the form their friends attributed to them in the spring and early summer; and much as Surefoot's failure at Epsom may have surprised those who had seen him win the Two Thousand Guineas with such consummate ease, he has done nothing since over a mile and a half to suggest that the Derby running was very far wrong, even admitting that he would have appeared to much greater advantage had he settled down to his work instead of attempting to savage Rathbeal and that colt's jockey, Robinson, at whose leg he made several vicious

snatches. Nothing is more futile than to speculate on what might have been in racing, or it, might be argued that, considering the modest capacity of the first three in the Derby, and the quantity of ground he made up in the straight, having finished only three-quarters of a length, a neck and a head behind the winner, Surefoot might have won had a more experienced jockey than Liddiard been on his back and better utilised his speed in a muddling race.

The Leger afforded no satisfactory test of the competitors, owing to the serious scrimmage at the turn, where some of the jockeys, not content with pursuing their own course, must needs drive their horses towards the left, thus closing up the field, and shutting in others that held a good position on the rails. It is fortunate that the performance did not lead to more disastrous results, and it seems evident, since a similar occurrence took place in the Lancashire Plate at Manchester in the following week, that nothing but some frightful accident or the death of one of the jockeys will move Stewards of Meetings to do their duty by suspending the offenders from riding again at the meeting, and reporting them to the Stewards of the Jockey Club for foul riding, and thus teach them not to endanger life and limb, besides destroying any chance a horse might possess of winning a race. It is true some jockeys lose their heads in a finish nearly as often as they lose their horses' heads. Eagerness to get first past the post somehow is the only excuse, but they must learn that race riding is not a game of football, where cannoning and jostling are allowed. As a matter of fact, by the recklessness and actual foul riding now so common, jockeys destroy the chances of their own horses quite as often as they injure their rivals. For their own sakes it is a pity that a considerable section of the riders who now hold licences do not take a lesson both in horsemanship and behaviour from Cannon, Watts, Webb, and Osborne.

Turning to the two-year-olds, five or six of them are close together, the best three colts probably being The Deemster, Gouverneur, and Orion. The first is not engaged in the Two Thousand, the entries for which include Orion, Valauris, Cuttlestone, Peter Flower, Gouverneur, Orvieto, and Cleator. Although, taking the line through Cereza, Gouverneur can have nothing in

hand of the symmetrical Peter Flower, he is a grand-looking horse, with beautiful shoulders, and if all goes well with him (there is a little "if," report says, about one of his legs) he will be hard to beat in this race, his conformation being especially adapted for striding over the Rowley Mile. The Deemster, who does not appear to have a pound in hand of him, if their respective races with Siphonia are to be accepted as correct, will make his first appearance in the Newmarket Stakes, decided on the Wednesday of the Second Spring Meeting; and here the most formidable of those engaged against him are Orion, Peter Flower, Valauris, Orvieto, and Cleator, all or most of which may have met Gouverneur in the Guineas, so that the result of this race will throw a direct light on the probabilities of the Derby. For my part I was much impressed with the game manner in which The Deemster struggled in the three races he took part in this year, and if he goes on the right way, and makes the improvement of which such a big backward colt seems capable, he may possibly be returned the hero of the Blue Riband of 1891, though his two-year-old form does not make him out the wonder he was supposed to be at Ascot. It is a pity that Lord Rosebery's filly Corstorphine is under suspicion of soundness, and it looks at present as if Haute Sâone would prove the best of her year.

As regards Jockey Club legislation during the past season, the ruling body of the Turf seem to have been greatly exercising their minds as to the correct significance of the term "added money," an important point to clerks of courses; and the Club have arrived at the conclusion, after a prolonged discussion, that it is best to omit the definition of added money altogether from the Rules of Racing. The discussion arose entirely on account of Rule 45, which reads as follows: "At every meeting advertised in the Racing Calendar the added money shall not be less than 300sov. per day, but of whatever money is added at the meeting one-half at least shall be given to races of a mile or upwards." The clerks of courses protested that there would be considerable difficulty in making the calculation, hence the omission of the definition, and a further alteration of Rule 45, which is now to read: "At every meeting advertised in the Racing Calendar one-half at least of the

total amount guaranteed for prizes shall be apportioned to races of a mile or upwards." There should surely, however, be no difficulty here, for added money can mean nothing else than money which is obtained from any other source than out of the pockets of owners of horses entered in any of the races at the meeting. A motion proposed and carried by Lord Cadogan is certain to have beneficial results. This is to the effect that "No declaration of forfeit shall be fixed to be made for races for two-year-olds only between the second Tuesday in October, when they are yearlings, and the last Tuesday in March in the following year." It will be perceived how great a boon this will be to all owners of horses, who formerly had to enter their yearlings in October or November, and to accept or declare profit for them on the 1st of January of the ensuing year, too early in many cases to render it possible for any correct result to be arrived at of the youngsters' ability, except through the rough-ups that generally take place before Christmas.

But if his lordship had carried his motion as originally proposed, owners would not have been allowed "to enter" their yearlings between those two dates; and this, in my humble opinion, would have been rather like giving away with one hand and taking back with the other; for during the Doncaster September meeting hundreds of yearlings are offered for sale, and it would have been hard on the purchasers of these animals if there were no two-year-old stakes to close at the end of the year when opportunity is afforded them of seeing their animals at work, and noting their action, or, as is too often the case, their want of action! But it is just this opportunity of knowing something about their young ones before they become two-year-olds that Lord Cadogan wished to deny to owners of racehorses, as he proposed another motion, that no money should be added to races for two-year-olds during the first two months of the racing season; but finding that this did not meet with the views of the Club, he modified it by proposing that, "In no race for two-year-olds only, run before the week which includes May 25th, shall the advertised value of money added to a sweepstakes exceed 200sov., or of a plate, 500sov.," and his lordship boldly stated that his only object was to prevent the offering of large prizes at this early date thus tempting and almost obliging owners to get

forward with horses which ought not to run till later in the year. The motion was lost by four votes. Speaking from personal experience, as having owned a large number of yearlings, though not very first-class ones, I do not believe that it is more injurious for two-year-olds to run the last week in March than the last week in May. I consider it absolutely necessary for yearlings to be broken in, backed, to have their paces taught them, and to be trained and even galloped, before Christmas.

Unfortunately, many thoroughbreds are annually born that can never make useful three-year-olds, as they hardly grow at all after they are yearlings, and are as much set at two years of age as older horses. Naturally this class of animal very seldom stays, and however well it is cared for, at the end of its two-year-old season is certain to degenerate into a moderate selling plater. Why, therefore, should not an owner have the pleasure of winning a nice stake or two with such a horse at the beginning of its two-year-old life? For if he does not do so then he never will. If an owner should be ignorant or greedy enough to order a big backward young one to be trained for an important spring two-year-old race the trainer would assuredly find out the impossibility of the task set him, and that, too, before the work could possibly have hurt the animal. If a horse at that age does not come to hand naturally, no attempt at training him can force him to do so; but even a backward animal ought not to be allowed to eat the bread of idleness. Many a trainer has found it impossible to train a fine two-year-old, for the sole reason that he has begun to train him too late. I do not believe that Lord Cadogan's motion would have had the effect he desired to produce. Owners would still, and in my humble opinion rightly too, have had their yearlings trained, and if the weather had kept open and propitious, would have tried them before the new year. It is not necessary to frighten them. Their gallops are gradually increased in speed, and when the spin does take place no whip ought to be allowed, and the animals that are beaten ought to be eased and not ridden out to the bitter end. What is racing in reality but a matter of speed? Well, it is exactly that speed an owner wants to test in a yearling without injuring the animal, and I maintain that training yearlings in moderation—in the way they ought to be trained—does

not harm them, because they generally tell their trainers whether they are likely to come early to hand or whether they require time.

Another very important argument must be put forward in favour of this early training, which, however, only affects yearlings purchased at public auction. These are generally loaded with fat to hide their defects, and that fat has to be got rid of as quickly as possible. It would be dangerous not to do so. It is a curious sight to see the young ones, after they have been properly physicked, with their legs filled with humour, and their backs covered with warbles. The sorry appearance they present when the fat has been got out of them is in striking contrast to their healthy look a month or six weeks afterwards, when a change has been wrought by good, wholesome food *and* work. As I said before, owners have every reason to be grateful to Lord Cadogan for that part of his motion that will soon be a law of racing; and perhaps the arguments I have endeavoured to put forward will show some little reason why it was not necessary to adopt the other part of his proposal, well meant as it was.

Considerable astonishment was caused by a suggestion of the Duke of St. Albans to do away with the right of an owner to make a declaration to win when he has two or more horses engaged in the same race. His Grace admits that it was an ancient *custom* to do so, and remarks that now a *rule* has been made to meet such cases. As I was the culprit that framed the rule and submitted it to the Committee on the New Rules for their adoption, I may perhaps be permitted, since I have incurred his Grace's displeasure, to write a few lines in support or defence of my proposition, which runs as follows: "An owner running two or more horses in a race may declare to win with one of them, and such declaration must be made at scale. A jockey riding a horse with which the owner has not declared to win, must on no account stop such horse, except in favour of the stable companion on whose behalf declaration to win has been made."

His Grace says that in the hands of an unscrupulous man this power of declaring might lead to great fraud; but he does not explain how the fraud is to be accomplished, and the rule was purposely framed to prevent malpractices that could have taken

place, and, for aught I know, may have done so, when the "custom" only of declaring prevailed, as it was not then clearly laid down that the jockey riding the horse with which the owner had not declared to win was not allowed to pull up except in favour of his stable companion. Formerly an owner might declare to win with a dark but worthless horse, in preference to a public performer; lay against the latter, and give his jockey orders, *at the last moment*, not to try with him, because he had declared to win with his other horse. The Duke goes on to argue that the public assembled on the course are prevented from knowing of a declaration made at scale; but he omits to mention that the jockey riding the first string always carries the proper colours, and he seems to have a very poor opinion of the intelligence and perspicacity of the racing public. The most powerful argument of all in favour of the rule is that an owner is enabled to run two two-year-olds in a rich stake, and if uncertain which is the better at the weights, assuming that one is penalised and the other a maiden, yet wishing to have two strings to his bow, he can declare to win with the penalised animal, and in the event of its success the maiden allowance of the other one is still kept for such important three-year-old races as the Epsom Grand Prize and the Prince of Wales's Stakes at Ascot. As to the remark about Memoir and Semolina in the One Thousand Guineas, it was quite natural that their noble owner should wish to win with the mare that he bred himself. The result of that race ought to have taught him, as it certainly did most of us, that if he again declared to win with Semolina in the Oaks, Memoir would be quite certain to beat her, and it would not have been a great hardship on the public to have backed the two mares coupled. Owners of horses ought to be left to do as they like, provided they act in a fair and straightforward manner, and I, for one, trust that the Jockey Club will not do away with the declaration rule, which is a help to owners in many ways. It might possibly be desirable to insist on the declaration being made one hour before the time fixed for the decision of a race, as that would give plenty of time for everyone on the course to become acquainted with the fact, which would be notified by an announcement on the telegraph board.

Every year brings its crop of Turf scandals. For some time past sinister rumours have been afloat connected with the riding of certain jockeys, and generally about the condition of the Turf. Two or three races that were decided during the autumn have been in particular the subject of much comment, and hints have been freely thrown out as to the existence of a dangerous confederacy between certain jockeys, "professional backers," and one or two bookmakers. Only quite recently a prominent and highly-respectable bookmaker exclaimed, "I can't understand why you gentlemen bet. *You've no chance.* All the money goes into the pockets of a few jockeys and their friends." This announcement is certainly disquieting, coming as it did from a man accustomed to make large books on every race, and whose knowledge, therefore, is entitled to respect. If one were to believe all or half one hears, it would be extremely foolish of any student of public form to support his fancy, or the horse that he believes to have the best chance without previously inquiring whether its backers are likely to have a good run for their money. Personally, I had never believed in the possibility of these conspiracies existing, at any rate for long. Sooner or later there must be a split in the camp. I have hitherto put the rumours down to the disordered imagination of some luckless backer, prone to see dishonesty in everything around him rather than confess that his judgment is at fault and that he has lost his money on horses which were not good enough to win their races. I have been ready as a rule, from experience of the uncertainties of the Turf, to believe that accident (and hardly a race is run in which one or more horses are not unfortunate) not dishonesty has been the real cause of failures that have provoked scandals. Recently, however, certain rumours have reached my ears that have made me revise my former opinion, and I have no hesitation in saying that, in my judgment, it would be desirable if these rumours could be investigated, and the real truth about them ascertained and published. It would certainly set many fears at rest, and those who have the interest of the Turf at heart would then look forward with more satisfaction to the racing season of 1891.

GEORGE CHETWYND.

ETHER DRINKING.

WE have been accustomed to hear on every hand loud pæans of rejoicing at the increased sobriety of the latter half of the nineteenth century. We have boasted that we do not now require the services of a butler to go round the prostrate guests under the dinner-table to unloose their neckties, and that it is no longer good form to make our capacity for intoxication manifest to all around. We exult in our more decorous and temperate use of intoxicant beverages, and over the millions among us who have renounced a limited indulgence in such articles. Yet during this very half century of the magnificent Temperance Reformation a new form of drunkenness has sprung into existence in Ireland, which, at first restricted within the narrow limits of a small town in the north, has gradually extended its borders till already it has appeared in other parts of "the Green Isle," in England, in Scotland, and elsewhere. Few even of those who have been cognisant of this piteous inebriate epidemic, and have striven to check its ravages, had, before the presentation of Mr. Ernest Hart's report to the Society for the Study of Inebriety, any idea of the enormous quantity of ether drunk by the as yet comparatively limited number of drinkers in South Derry (its original seat) and Tyrone.

According to the public testimony of the rector of Cookstown (population over 13,000), in Tyrone, in addition to a large quantity conveyed secretly by rail or by private conveyance, more than 2 tons of ether are openly carried every year on the railway into that district. The reverend gentleman knew two small villages in which each of two persons sold more than 500gal. yearly. The ether is given to school-children and messengers by traders, and in some places causes the larger part of the Sunday drunkenness. One

trader buys in quantities of 50gal. at a time. A wholesale dealer informed Mr. Hart that he distributed to the ether-drinking districts more than a ton of the drug in the course of the year. In the southern part of the County of Derry one Belfast firm sold to a retail dealer at Maghera 10gal. to 15gal., and to another at Draperstown from 5gal. to 8gal. a month, sending larger quantities to Cookstown. Another Belfast firm sells from 25cwt. to 30cwt. in the year, ost of this going to the localities in South Derry and Tyrone. third Belfast house buys 7,124lb. in the twelve months, the ount being calculated on an average of six months from the books of the firm. This amount is sent over the whole of the northern part of Ireland, 5,074lb. going to the ether-drinking area, the probability being that the difference between these amounts represents what may be considered to be the legitimate use of methylated ether in medicine and in the arts. In round numbers, about three-fourths of the amount of this intoxicant distributed may be held to have been applied to purposes of intoxication. The quantity taken yearly by Omagh was stated by Mr. H. N. Draper, in 1870, to have been about 225gal. These large quantities, really enormous when the limited roll of the consumers is considered, do not stand for anything like the actual amount imported. Considerable quantities are surreptitiously introduced into South Derry and Tyrone. The reason for this smuggling is stated by Mr. Hart to be the saving of the extra carriage rate to which ether, as an explosive which has to be kept on deck, is liable. The railway companies, too, owing to the highly inflammable property of ether, either decline to carry it or impose exceedingly burdensome conditions. The smuggling is often effected by putting the ether up in bottles such as liquid drugs are ordinarily carried in. The population among whom and the area over which this injurious practice chiefly prevails are restricted. The headquarters may be located in Draperstown, the original starting point, the *fons et origo mali*. The inhabitants of this district numbered 9,743 at the last census, and the area covers 41,036 acres. Maghera has a population of 13,852, with an area of 34,791 acres. Magherafelt has 14,134 residents, and 22,457 acres. The population of Moneymore is 12,316, and the acreage 32,006. Bellaghy has 15,481 inhabitants, and 25,611 acres. Besides

the above districts which are in County Derry, Cookstown, an outlying centre of etheromania, has a population of 13,326, and an area of 32,979 acres. We have thus a total population of 78,852 souls, over an area of 188,880 acres. There are adjoining localities where the ether habit is more or less prevalent, and there are more remote places where the habit has appeared, but in all probability this morbid addiction really exists on Irish territory inhabited by at least 100,000 persons. In this incriminated area are included several tracts of land, dotted with villages, contiguous to the places above mentioned. Everyone peculiarly interested in this traffic is reticent on the subject. For other reasons politicians and clerics do not care to proclaim the weaknesses of their followers.

The outward and unmistakable signs of this form of inebriety are manifest to the senses—indoors at social and other gatherings, out of doors where the people congregate! On market and fair days, wherever there is a crowd the atmosphere is "etherial." The air literally reeks with the fumes of ether. In the third-class railway carriages the smell of the drug from the women travelling from and to market is described by a guard as "disgusting and abominable." Even the most sacred edifice, notwithstanding strong rebukes from the altar, is not free from this pestiferous pollution. To anyone unaccustomed to this unique unpleasant experience the odour from the ether-laden breaths is sickening and repulsive. I shall never forget the first time I inhaled this contaminated air. The thousand classic "scents" of Cologne were a perfumed gale from Araby the Blest compared with this overpowering, nauseating, loathsome blast. Within, only a rush to an open window, and without, only a sudden bolt from the dense and horrid air of the reeking street, has warded off as good an imitation of *mal de mer* as might have provoked even an Irish saint to a torrent of indignant eloquence. At dances, where ether is drunk, it can readily be imagined that the fun waxes fast and furious. Owing to the frequency of frenzied outbursts, both at dances and wakes, the scenes at times are neither decorous nor peaceful. The baneful potion is freely sold at public-houses and groceries.

Though affected mainly by the poorer classes, persons of comfortable means and respectable position are in no way shamefaced in

their acknowledgment of the habit when they are detected. Ether-takers of this class, like *habitués* of other forms of inebriety, rarely avow the true reason for their wrong-doing. They, if they are to be believed, take ether as others take alcohol, for "spasms," "stomachic troubles," "wind," and various other mundane ills. To judge from the frequent resort to this alleged ether panacea, not a few well-to-do and highly-educated individuals are apparently subject to almost incessant bodily ailments. When prostrate from the effects of a debauch it is the cucumber or the salmon, never the ether nor the alcohol that has been to blame. Among ether inebriates have been members of the learned professions. Though ether has not laid hold of the young to anything like the proportional extent that alcohol has done, it is consumed by too many of the exuberant and youthful Irish population. At an inquest held a few months ago, on a child in Tyrone, the father testified that he took ether himself and that the deceased would take a teaspoonful occasionally. The children, he went on to say, often bought half a pint for him when they were at the market. Persons of both sexes and of almost all ages have become slaves to this degrading and intractable disease. As in England with alcohol, the women unhappily vie with the men in this unholy rivalry, and their prowess is remarkable. Can it be that the female members of the incriminated communities have felt it incumbent on them to show by their ether exploits that they can do this thing, like everything else, as thoroughly as "the lords of creation"? Whatever the reason, the fair sex have taken their full share of this latter-day debasing debauchery. The poisonous stuff is actually often taken round to balls, meetings of lodges, and other assemblies, and there sold by women.

It has been asserted that ether-drinking has been specially favoured by Roman Catholics, and darkly hinted by some of my Protestant friends that this "vice," as it is frequently, though erroneously called, is in some way or other a development or production of Romanism. I cannot well conceive of a greater fallacy. There are enough and to spare of Protestant ether-tipplers, and I do not hesitate to express my belief from what I have seen that if this pernicious habit once take root in English or Scottish localities, the residents of which are mainly Protestants, the habit will as

rapidly extend as it has done anywhere in Ireland. I have myself seen cases among Protestants, and I know of nothing in the rise and progress of this disease which can warrant the assertion that any single religious communion has contributed to its appearance and extension. So far as the prevailing creed of the Irish is concerned, I can testify that the Roman Catholic priests in the plague-stricken spots have been most earnest and indefatigable in their endeavours to arrest the march of the pestilence among their flocks. So have the Protestant clergy. The action of the latter—again emphasised by the recent petition of the Synod of the Irish Church to Parliament to grant an inquiry into the whole matter—is unmistakable evidence of the evil having penetrated into their ecclesiastical fold. Not only do I acquit all theological systems of any blame in the genesis and growth of ether intemperance in Ireland, but I gladly commend the clergy of every denomination there for their persistent efforts to minimise the mischief, and to enlist the service of the Legislature in a resolute attempt to stay and, if possible, stamp out the evil. One word of counsel I respectfully tender to our clerical friends. Very naturally, though they have spoken strongly to their members from the pulpit and benefited not a few of their erring charges by personal admonition, they have said little on the painful subject in public. The time for reticence has passed. The peril, present and prospective, is too grave to admit of further concealment. The truth ought now to be proclaimed. The clergy are in an excellent position to know and bear witness to the facts. Let them speak out openly and plainly. Let them vie with each other in a noble rivalry to gain the ear of the British people and the British Government, in the interest alike of Ireland and of humanity.

Intoxication by ether differs somewhat from that by alcohol; the main difference is in the rapidity with which the characteristic phenomena appear and disappear under ether. There are the same Acts in the Drama of Intoxication. There is the first Act of stimulation or exhilaration, when a genial warmth is felt over the whole man, when the brain is filled with blithesome gladness, when love glistens in the eyes, when the pulses beat with joyous bound, when all seems strength, vigour, activity and jollity. With some this

heightened and quickened revel of the circulation manifests itself in pugnacity, and the national celebrity of the race for combativeness may be so aroused as to transform for the moment even the most phlegmatic of Hibernia's sons into a vigorous representative of the "fighting Irish." To this exhilaration succeeds the second Act of the Intoxication Play, manifested by greater mental tumult and confusion, with riotous imagination and disordered thought, accompanied by a loss of power over the muscles, especially of the limbs and organ of speech. Here we have an automatic performance of vital functions with an abnegation of the "Ego," and progressive paralysis of the brain and spinal cord. To these follows the third and concluding Act of this tragic drama, characterised by an eclipse of the faculties, of the senses, the perception, the will, the feelings, and the reason. This is the stage of "dead drunkenness," coma, and stertorous breathing, a veritable living death. These successive stages in the drunkard's progress, modified to some extent by the idiosyncracy of the drinker, are observed under ether as under alcohol. The conspicuous distinction lies in the "time." The drinker of ether can become intoxicated and regain sobriety before the drinker of alcohol has really become properly intoxicated. I have known an alcoholist get thoroughly drunk twice in twenty-four hours though this rarely happens, but the educated etherist can, at a pinch, get drunk and sober again six times in the same space of time. I have seen a man sober as a judge at noon, offensively drunk on ether in twenty-five minutes, and as sober as before by a quarter-past one o'clock. The phases of an ether outbreak can all be exhibited in even less time. The rapidity with which the phenomena pass before the vision is truly astounding. The inexperienced can be drunk and sober again before he has any idea of being drunk. I recollect a medical friend of mine, who once insisted that all these narratives of rapid ether drunkenness were but travellers' tales, and could not be true. He consented to an experiment. After a draught of water he drank nearly a wineglassful of ether, became intoxicated and combative, thrust his hand through a window-pane, and in less than fifty minutes, on awaking from a drunken sleep, denied that he had been overcome till convinced by the evidence of his senses as to the wounded and bleeding hand. For consenting

to this act of human vivisection (though it was self-inflicted) I offer no apology. On a broad comparison the duration of the complete drunken ether phenomena appears to me to bear much the same chronological relation to the complete drunken alcohol phenomena that the American does to the British inebriate career. An average citizen of the United States will enter upon, carry on, and finish, by what is wrongfully called a "natural death," a life-course of drunkenness in one-third of the time which an average Britisher will consume in a similar process at home. With ether an average Irishman or Englishman will get drunk and sober again three times for once that he will be able to do so on alcohol. This is a feature which highly commends ether to a certain class of inebriates. They can enjoy three times as many "drunks" in the same time.

The immediate effects of an ether debauch appear to pass off with equal swiftness. So evanescent are the visible *sequelæ* that the drinker is apt to lay the flattering unction to his soul, when his spree is over, that he is none the worse for it, and unheeding pursues the even tenor of his way till tempted again to resort to anæsthetic oblivion. In other cases, during the brief after-stage of reaction when the transitory undue exaltation has been replaced by gloom and depression, this utter wretchedness yearns for a renewal of the delusive anæsthetic. If this inarticulate cry of despair be not resisted, the mocking draught is repeated and the serio-comedy of narcotic deception, of momentary mirth succeeded by woe unutterable, is produced, not nightly, but almost hourly, till the *force majeure* of circumstances rings down the curtain for the nonce. It has been assumed that because no gross pathological lesions have been noticed, such as the alcoholic hobnail liver, ether is not so poisonous an intoxicant as we know alcohol to be. That alcohol is an irritant narcotic poison no intelligent observer can dispute. The marks of the poisoning of the bodily structure by alcohol are "writ large" on a hecatomb of victims. I am afraid to say how many bodies of persons on whom an inquest has been held have, on examination after death, unfolded such a chain of characteristic appearances—liver-hardening, kidney-destruction, heart-fatty degeneration, stomach inflammation, brain and membrane tissue alteration—as has compelled me to testify that the deceased had died from alcoholic

poisoning, and has left a coroner's jury no other option in their verdict. With ether, such gross footprints of a disastrous invasion have not yet been disclosed to view at a post-mortem, nor has such a direct physical consequence as dropsy—a common sequel of alcoholic excess—been recorded. But for my own part I attribute this mainly to the lack of opportunity. Ether-drinking is but half a century old. Alcohol-taking can boast a reign almost as old as the human race. I have not the slightest doubt that ether will yet, if this alluring and demoralising habit is not nipped in the bud, be found—after allowance for the difference in the immediate symptoms, and the far shorter operation on the body and brain of man—as deadly a poison as even the arch-poison alcohol. Some physical disaster has, however, been seen. The most common disorders have been such as affect the digestion, the nervous system, the circulation, and the nutrition. Chronic and distressing inflammation of the stomach, impairment of the digestive functions, trembling, melancholy, and suspicions, lividity, coldness, and intermittent pulse, with persistent wasting, have not infrequently been the penalties paid by the excessive ether-taker. There has, practically, not been time to note accurately the effect of this drug in shortening life, but premature old age is a frequent issue. I have seen an etheromaniac at forty-one a wizened, bent, decrepit, and tottering old man; a battered and lonely hulk cast up on the shores of existence—a hopeless and despairing human wreck. There have already been nearly a dozen fatal cases, perhaps more. The most terrible influence of ether indulgence is, however, on the *morale*. Fascinated by the initial lightsome joyousness of his first draught, the subject of the inebriate predisposition gradually, but insensibly, yields again and yet again to the false allurements of the potent enchanter, till the erewhile servant of a second becomes the tyrant of a lifetime. The miserable ether sot, whatever his previous accomplishments and station, is bound hand and foot in the iron fetters of a slavery the most degrading on earth, a bondage without one redeeming feature to lighten its awesome darkness. The ether inebriate, with a morbid and ever-growing craving for larger doses of the deadly drug, which he hates but must devour, sinks into a loathsomeness of falsehood, deceit, and cunning. The mischief wrought

on body, brain, and *morale* by ether addiction does not end here. Already, although the outside age of this habit has been too short to allow of many opportunities for such a transmission, heredity has been seen to operate. In addition to a special tendency to excess, the secondary effects on organ and disposition have been handed down from parent to child. In the effervescent friskiness of this form of inebriate indulgence, as in the maniacal frenzy which in some cases is aroused, there is a liability to accident. From the inflammable nature of ether probably the many tales or legends of recent spontaneous combustion have arisen. Though I give no credence to such stories, spontaneous combustion being in my judgment impossible, in all likelihood a living body saturated with ether would, on the application of a light from without, readily ignite and be rapidly consumed. The large majority of ether-tipplers, like the large majority of alcohol-takers, are, happily, able to limit their potations. Yet even these "moderate drinkers" of ether usually pay some unwelcome price for their practice. They very often suffer from disorders of the stomach, dyspepsia, and various worrying departures from sound health. In both moderate and immoderate ether-users the disturbing effect is decidedly aggravated by the consumption of ardent spirits, which are generally affected in Ireland in the shape of whisky. This very common twin anæsthetic indulgence is laden with even more concealed than patent mischief.

The ceremonial with which ether is swallowed by an undergraduate at the training college of ether-drinking is at first sight as formidable as it is amusing. The intoxicant being rather pungent for the uneducated mouth and throat, a cooling draught of cold water is swallowed before and after the blisterful, though to some-blissful, potation. One would think that all this ceremonial paraphernalia of preparation and correction would be forbidding enough to prevent the continuance of the habit. It is not so, however. When the learner graduates in this unwholesome school the mucous membrane becomes hardened and callous. He can toss off his allowance as deftly as a Highlandman his dram of real "mountain dew." The quantity taken at one drink ranges from a teaspoonful to a quarter of a pint. A child of tender years will quaff a teaspoonful with delight, while by a "seasoned cask" one

or two wineglassfuls will be drunk with gusto. The whole amount put out of sight in one day sometimes reaches as much as a pint. The dose requisite to secure intoxication varies in proportion to the training and the capacity of the drinker. To average adult persons unaccustomed to ether, half a wineglassful will bring the desired effect. Intoxication can thus be secured for the sum of fourpence, the price at which the liquid is generally retailed, at the rate of per ounce after the realisation of a handsome profit by the retailer. This recalls the palmy days of old in England, immortalised by the classic sign, "Drunk for a penny—dead drunk for twopence." As the drinker proceeds on his ignoble way the quantity must be increased. As the intoxicant is so cheap, the first cost of intoxication is practically within the reach of all. The reason for this cheapness is the production of the article from methylated spirit, which, by an Act (18 and 19 Vic.) passed thirty-six years ago, was exempted from duty for use in the arts on the addition of one-ninth of wood naphtha to render it nauseous for drinking purposes. There was a time when sulphuric ether was used, but the modern methylated ether has taken its place. As, during the conversion of methylated spirit into ether, the naphtha is destroyed, methylated ether has no nauseating naphtha taste.

The history of this curious Irish experience is somewhat obscure. It has been contended that Father Mathew was to blame, as his teetotal converts longed for some non-alcoholic exhilarant, and, believing that ether did not intoxicate, embraced with avidity the opportunity offered by this article. That theory is hardly tenable, for whisky is frequently consumed by ether-drinkers. Besides, all Ireland took the pledge, yet only over a limited area has ether-taking appeared. This habit was first observed at Draperstown, forty-eight years ago. It did not practically go beyond Draperstown till after the introduction of the cheap methylated ether in 1856, and the subsequent greater activity displayed in Ireland in suppressing illicit distillation.

Such is a bird's-eye view of this remarkable ether phenomenon. Having regard to the abundant, frequent, and potential evil accruing from ether indulgence, it has become a matter of the highest importance to adopt the means best calculated to check its expansion

and stamp it out where it now exists. The most obvious measure, which could be immediately enforced, would be the compulsory addition of the nauseous wood naphtha, after the completion of the conversion of the methylated spirit into ether. This would aid as a deterrent to even moderate drinking. Another plan would be the abolition of the retail trade, the ether for drinking being usually sold in small quantities. Again, the sale of ether might be confined (under a heavy fine) to druggists, who might be made to take out a licence authorising the sale in a definite substantial quantity. The registration of the name and address of the purchaser, and the alleged legitimate purpose in the arts or in medicine to which the drug was to be applied, might also be required. Some such measures as these, with the presentation of the facts to Sir Lyon Playfair's Committee, might prove effectual to a considerable extent in destroying this nefarious and pestiferous traffic in a disease-producing commodity, and be a barrier to the extension of ether-drinking to the rest of the British Empire and, indeed, the habitable globe.

NORMAN KERR.

FOLIOS AND FOOTLIGHTS.

MR. BRANDER MATTHEWS has recently laid down some elementary rules about the duties of critics, and it would be well, my good friend, if you were to profit by these instead of showing your ignorance of the homilist's authority. Is it not enough to be told that "an American of literary taste is simply staggered" when he reads the reviews of contemporary fiction in the English journals which devote themselves to criticism? For example, the literary American finds in the *Spectator* or the *Saturday Review* or the *Athenæum* extravagant praises of the lady who calls herself "Rita." This shows how much more observant your American is than your purblind islander. I imagine there are very few men in this country, with an average taste for literature, who ever read a line of "Rita," or who are in the least aware that her novels have received in high critical quarters the encomiums which have staggered Mr. Brander Matthews. However, the literary American has his revenge. We have staggered him; he returns the shock with galvanic force. The novel of England, he informs us, is now inferior in art to the novel of America. You see, no one can beat the literary American in the staggering line, when he gives his mind to it. Perhaps the battery does not shake my nerves so much, for whenever I find a man preaching "the whole duty of critics" I suspect that presently he will commit himself to some paralysing proposition. Besides, have I not read month by month the sermons of Mr. W. D. Howells in *Harper's Magazine?* Did not this literary American undertake the patriotic task of persuading every scribbler in the United States, even the police-court reporter, that he was a man of letters, if not actually entitled to turn up his nose at mere Britishers? Having read Mr. Howells's

encomiums of books and plays which have no conceivable claim to distinction except that they are written by American citizens, I have pretty well ceased to be staggered by anything.

Evidently, then, Mr. Brander Matthews's "whole duty of critics" is incomplete. He has omitted one salutary rule: "Pocket your patriotism." But it is pleasing to note that the literary American restrains himself so far as not to assert that the novel of America is superior to the novel of France, though he thoughtfully brackets them, at the expense of England, and leaves it an open question whether he will not some day stagger the French. But if you have any pernicious remnant of literary Chauvinism, I hope it will not survive the series of foreign classics of which Mr. William Heinemann, aided by Mr. Edmund Gosse, is publishing translations, to the great contentment of all lovers of literature. How far Mr. Heinemann may pursue this enterprise without exciting the suspicions of some National Air-Pump Association, I should be sorry to predict. You know the tremendous part which the Air-Pump plays in our society. It generates (if I may venture to use such a questionable word) the moral atmosphere which is breathed by the Young Person. Normally, the cheek of that lady wears a demure pink, varied by a becoming pallor when the heroine in whom she is interested is in some trying predicament, such as the unsuspected agnosticism of the hero, or the unaccountable behaviour of a wealthy uncle, who is expected to endow the happy pair, and falls a victim to the designing widow of a Dissenter. But it is dangerous to Air-Pump principles to introduce this pattern of propriety to a writer of whom everybody who works the Pump Handle may not be able to say that he has never deranged this admirably regulated complexion. I heard the other day of one of these social Pumpers who, when he married, made his wife pledge herself never to read Dickens. That unwholesome author was banished from the blessed household till the Pumper departed this life, and the Handle was still. Then the widow consoled herself not only with Dickens, but with all manner of profane novelists. I should not be surprised to hear that she is familiar even with these stories of Emil Franzos and Guy de Maupassant, which Mr. Heinemann has given us in an English dress. Few

novels of recent times have a more sustained and vivid human interest than *The Chief Justice*,* though the history of Victor Sendlingen's crime and punishment may not be an appropriate study for boarding-schools. As for M. de Maupassant's work,† I cherish a faint hope that it will give many English readers an inkling of what is meant by critics who insist on the superiority of French methods in the art of fiction. The story is exquisite in its simplicity, in its proportions, in its truth of observation, in the incidents which illustrate character and unfold tragedy. All the effects of an admirably balanced composition are obtained because the author is determined to employ no more colour than is needed, and to write not one superfluous word. He does not fall into that besetting vice of English novelists, the word-painting of objects which, as Mr. R. L. Stevenson said the other day, cannot be represented except on actual canvas. It would be well, indeed, if M. de Maupassant's confession of faith, which serves as an introduction to this volume, were committed to memory by everyone who aspires to be an artist in fiction. In the first place, the budding realist would profit by this Frenchman's sympathetic attitude towards other schools. Like Flaubert, the author of *Pierre and Jean* puts into his writing no shadow of his own personality; but that would be a poor reason for despising the philosophic comment which accompanies the fables of George Meredith. Nor need we condemn a great humorist for overcrowding a book with characters, if these remain to us as memorable types. But as it is given to few to be pre-eminent, either as humorists or philosophers, the individuality which shapes itself according to the Maupassant method is likely on the whole to produce the most finished work.

This, of course, has nothing to do with M. de Maupassant's theory of life, which you may treat as you please. Every man has a right to survey the human comedy through his own spectacles. But the bulk of English fiction is comparatively weak in quality, because the writers have no artistic purpose, no serious standpoint of any kind. It is not necessary to be always struggling with a

* *The Chief Justice*. By Emil Franzos. William Heinemann, London. 1890.
† *Pierre and Jean*. By Guy de Maupassant. William Heinemann, London. 1890.

social problem. There is no ethical puzzle in *Pierre and Jean*. The book is a piece of convincing experience presented in the shape of art. You may construct a purely romantic story on the same lines of workmanship—that is to say, you might if you had not to write for Mr. Mudie. Here is a charming little tale of a crazy nobleman who marries a poor Polish girl with whom he used to make cigarettes in a shop before he came into possession of the estates which his companions supposed to be the creation of a disordered brain.* There is a pathetic grace in the figure of this poor gentleman, and the buffets he receives with such patient dignity from a rough world have humour of a rare order. But Mr. Mudie demands two volumes, at least; so the artistic effect of the story is ruined by some of the most flagrant padding I have ever seen. You can put your finger on every point at which Mr. Crawford has said to himself, "Here I must shovel in commonplaces to fill up space." So a work which might have been a perfect specimen of its class, and which even the most fastidious reader might have read with pleasure, is sacrificed because Mr. Crawford must, at any cost, produce his fifty thousand words.

It is plain that all the talent in the world cannot do itself justice when it works under conditions which would have driven Flaubert mad. When M. de Maupassant served his remarkable apprenticeship to that great master, he did not yearn to rush into big type, and wide margins, and the greatest possible number of words, as soon as he had a story in his head. He used to be set by Flaubert to describe groups and incidents in the street, and, as years went by, he was occasionally refreshed to learn that in time he might write a passable book. If a training of that kind were widespread it would save many writers from the pangs of failure which follow a first success. I suppose *John Ward, Preacher*, made a considerable impression on both sides of the Atlantic. It dealt with a religious question which has a strong human side; but the author has invented another religious question which is quite inhuman.† The young woman who is brought up by an infidel

* *A Cigarette Maker's Romance*. By F. Marion Crawford. Macmillan and Co. 1890.
† *Sidney*. By Margaret Deland. Longmans and Co. 1890.

father to disbelieve not only in religion but even in love, is scarcely conceivable. But when you discover that the death of an aunt, whom she had treated with cold indifference, suddenly inspires her both with religious feeling and human passion, the argument simply departs from the range of experience and becomes a tract. A little appalled by her own abruptness, Miss Deland tells us that Sidney was not converted to any creed; but really such a process might as well have made her believe in ecclesiastical miracles. Yet the book has no little charm of delicacy and observation of character. That is the mischief of it. These incomplete explorers of the human mind are not content with what they have actually discovered, but they must devise some crisis out of incredible materials, and pass it off as a piece of comforting pyschology. I have a different quarrel with Mr. Compton.* His object was apparently to tell a lively story, and then take everybody in with a secret. After a large experience of secrets, I can freely say that Mr. Compton deserves a high place for exasperating surprise. He is rather like the over-quoted Mr. Wemmick, who might have said, "Hullo! Now's the time for a murder. Let's do it." But you had better read *Scot Free* just to see whether it will take you in, and also because it is written with a brightness of touch which suggests that Mr. Compton, in his next venture, may relieve himself of murders without forfeiting the reader's interest. Mr. Bram Stoker's story† belongs to a different category. It is an Irish romance, full of the sincerity which gives this kind of fiction its value, and not overdone in any detail. You are transported from Saxon matter-of-fact to Celtic fancy; and, faith, I don't think it's always a bad exchange.

Let the realistic school say what they will, we cannot get romance out of our blood. I give myself periodical doses of naturalism to keep it down. After one of Lady Lindsay's‡ dainty lyrics, moulded with a true artistic touch, has disposed you to pleasant fancies, a cold draught of Lecky will lower the romantic temperature.§ I can also recommend a little Froude powder

* *Scot Free.* By C. G. Compton. Kegan Paul and Co. 1890.

† *The Snake's Pass.* By Bram Stoker, M.A. Kegan Paul and Co. 1890.

‡ *Lyrics.* By Lady Lindsay. Kegan Paul and Co. 1890.

§ *History of the Eighteenth Century.* By W. H. Lecky. Vols. VII and VIII. Longmans and Co. 1890.

for restoring the system to its proper cynical balance.* But these prescriptions do not always work, for I find myself in a day-dream over Mr. Lecky's pages when the passions of a nation sweep to a dramatic climax; and even Mr. Froude's analysis does not wither all the romance of Disraeli's career. And when we leave the folios and betake ourselves to the footlights, there is no cooling drug I know—not even the biography of Ibsen†—which can make the pulse of imagination beat time to the methods of realism. *The Bride of Lammermoor* may be rather tough reading now, but the charm comes back when I watch Edgar and Lucy at the Mermaiden's Well in *Ravenswood*. When I saw *Beau Austin* I said, "The dandy who bestows a great deal more thought on his cravats than on the girl he has betrayed is surely bound by all the laws of naturalism to be true to his cardinal principle in life. Manifestly, it is Mr. Beerbohm Tree's duty to keep me in this cold-blooded humour." But what happened? Why, he wept at the first rebuke, posted off to the lady to throw himself on her forgiveness and beg her hand, and (which was much more serious) threw me into a high romantic fever, from which I have not yet recovered. This is not fair to a man who finds that romance is a kind of Kelpie's Flow, in which he is always liable to be swallowed up. However, I owe a debt of gratitude to the author of *Sunlight and Shadow*. It is romantic for a wife to turn up when she is conveniently supposed to be dead, but this expedient in Mr. Carton's piece moved me not at all. I did not feel in the least light-headed. It is a comfort to know that, when all other medicines have failed, a visit to the Avenue will provide the much-needed sedative. Besides, *Sunlight and Shadow* has a variety of excellences which, together with the admirable acting, combine to keep one's nerves tolerably well adjusted. So by taking these, with a few drops from the Mermaiden's Well, and stirring the mixture very slightly with Beau Austin's cravat, I may hope to be fairly sane.

L. F. AUSTIN.

* *The Earl of Beaconsfield.* By J. A. Froude. Sampson Low and Co. 1890.
† *Henrik Ibsen.* By Henrik Jaeger. William Heinemann, London. 1890.

THE WORLD'S DESIRE.

By H. RIDER HAGGARD and ANDREW LANG.

Helenam vero immortalem fuisse indicat tempus.—Servius. Æneid II., 501.

BOOK III.

Chapter VI.

THE BURNING OF THE SHRINE.

Rei the Priest saw and heard. Then, turning, he stole away through the maddened throng of women and, with what speed he might, from the Temple. His heart was filled with fear and shame, for he knew full well that Pharaoh was dead, not at the hand of Hathor, but at the hand of Meriamun the Queen, whom he had loved. He knew well that dead Meneptah spake not with the voice of the dread Gods, but with the voice of the magic of Meriamun, who, of all women that have been since the days of Taia, was the most skilled in evil magic, the lore of the Snake. He knew also that Meriamun would slay Helen for the same cause wherefore she had slain Pharaoh, that she might win the Wanderer to her arms. While Helen lived he was not to be won away.

Now Rei was a righteous man, loving the Gods and good, and hating evil, and his heart burned because of the wickedness of the woman that once he cherished. This he swore that he would do, if time was left to him: he would warn Helen so that she might fly the fire if so she willed, ay, and would tell her all the wickedness of Meriamun, her foe.

His old feet stumbled over each other as he fled till he came to the gates of the temple of the Hathor and knocked upon the gates.

"What wouldst thou, old crone?" asked the priest who sat in the gates.

"I would be led to the presence of the Hathor," he answered.

"No woman hath passed up to look upon the Hathor," said the priest. "That women do not seek."

Then Rei made a secret sign, and, wondering greatly that a woman should have the inner wisdom, the priest let him pass.

He came to the second gates.

"What wouldst thou?" said the priest who sat in the gates.

"I would go up into the presence of the Hathor."

"No woman hath willed to look upon the Hathor," said the priest.

Then again Rei made the secret sign, but still the priest wavered.

"Let me pass, thou foolish warden," said Rei. "I am a messenger from the Gods.'

"If thou are a mortal messenger, woman, thou goest to thy doom," said the priest.

"On my head be it," answered Rei, and the priest let him pass, wondering.

Now he stood before the doors of the alabaster shrine, that glowed with the light within. Still Rei paused not, only uttering a prayer that he might be saved from the unseen swords; he lifted the latch of bronze and entered fearfully. But none fell upon him, nor was he smitten of invisible spears. Before him swung the curtains of Tyrian web, but no sound of singing came from behind the curtains. All was silence in the shrine. He passed between the curtains and looked up the Sanctuary. It was lit with many hanging lamps, and by their light he saw the Goddess Helen seated between the pillars of her loom. But she wove no more at the loom. The web of fate was rent by the Wanderer's hands, and lay on either side, a shining cloth of gold. The Goddess Helen sat songless in her lonely shrine, and on her breast gleamed the red star of light that wept the blood of men. Her head rested on her hand, and her heavenly eyes of blue gazed emptily down the empty shrine.

Rei drew near, trembling, though she seemed to see him not at all, and at last flung himself upon the earth before her. Now at length she saw him and spoke in her voice of music:

"Who art thou that dares to break in upon my sorrow?" she said, wonderingly. "Art thou indeed a woman come to look on one who, by the will of the Gods, is each woman's deadliest foe?"

Then Rei raised himself, saying:

"No woman am I, Immortal Lady. I am Rei; that aged Priest that met thee two nights gone by the pylon gates, and led thee to the Palace of Pharaoh. And I have dared to seek thy shrine to tell thee that thou art in danger at the hands of Meriamun the Queen, and also to give thee a certain message with which I am charged by him who is named the Wanderer."

Now Helen looked upon him wonderingly and spoke:

"Didst thou not but now name me Immortal, Rei? How, then, can I be in danger, who am immortal, and not to be harmed of men. Death hath no part in me. Speak not to me of dangers, who, alas! can never die till everything is done; but tell me of that faithless Wanderer, whom I must love with all the womanhood that shuts my spirit in, and all my spirit that is clothed in womanhood. For, Rei, the Gods withholding Death have, in their wrath, cursed me with love to torment my deathlessness. Oh! when I saw him standing where now thou standest, my soul knew its other part, and I learned that the curse I give to others had fallen on myself and him."

'Yet was this Wanderer not altogether faithless to thee, Lady," said Rei. "Listen and I will tell thee all."

"Speak on," she said. "Oh speak, and speak swiftly!"

Then Rei told Helen all that tale which the Wanderer had charged him to deliver in her ear, and keep no word back. He told her how Meriamun had beguiled Eperitus in her shape; how he had fallen in the snare and had sworn by the Snake, he who should have sworn by the Star. He told her how the Wanderer had learned the truth, and, learning it, had cursed the witch who wronged him; how he had been overcome by the Guards and borne to the bed of torment; how he had been freed by the craft of Meriamun, and how he had gone forth to lead the host of Khem. All this he told her swiftly, hiding nought, while she listened with eager ears.

"Truly," she said, when all was told, "truly, thou art a happy messenger. Now I forgive him all. Yet has he sworn by the Snake who should have sworn by the Star, and because of his fault never in this space of life shall Helen call him Lord. Yet will we follow him, Rei. Hark, what is that? Again it comes, that long shrill cry as of fiends broke loose from Hell."

"It is the Queen," quoth Rei, "the Queen who, with all the women of Tanis, comes hither to burn thee in thy shrine. She hath slain Pharaoh, and now she would slay thee also and so win the Wanderer to her arms. Fly, Lady! Fly!"

"Nay, I fly not," said Helen. "Let her come. But do thou, Rei, pass through the temple gates and mingle with the crowd. There thou shalt await my coming; and when I come, draw near fearing nothing, and together we will pass down the path of the Wanderer in such fashion as I shall show thee. Go! go swiftly, and bid those who minister to me pass out with thee."

Then Rei turned and fled. Without the doors of the shrine many priests were gathered.

"Fly! The women of Tanis are upon you!" he cried. "I charge ye to fly!"

"This old crone is mad!" quoth one. "We watch the Hathor, and, come all the women of the world, we fly not."

"Ye are mad indeed," said Rei, and sped on.

He passed the gates; the gates clashed behind him. He won the outer space, and, hiding in the shadows of the temple walls, looked forth. The night was dark, but from every side a thousand lights poured down towards the shrine. On they came, like lanterns on the waters of Sihor at the night of the feast of lanterns. Now he could see their host. It was the host of the women of Tanis, and every woman bore a lighted torch. They came by tens, by hundreds, and by thousands, and before them was Meriamun, seated in a golden chariot, and with them were asses, oxen, and camels, laden with bitumen, wood, and reeds. Now they gained the gates, and now they crashed them in with battering trees of palm. The gates fell, the women poured through them. At their head went Meriamun the Queen. Bidding certain of them stay by her chariot, she passed through and, standing at the inner gates, called aloud to the priests to throw them wide.

"Who art thou, who darest come up with fire against the holy temple of the Hathor?" asked the guardian of the gates.

"I am Meriamun, the Queen of Khem," she answered, "come with the women of Tanis to slay the witch thou guardest. Throw the gates wide, or die with the witch."

"If indeed thou art the Queen," answered the priest, "here there sits a greater Queen than thou. Go back! Go back, Meriamun, who art not afraid to offer violence to the immortal Gods. Go back! lest the curse smite thee."

"Draw on! draw on! ye women," cried Meriamun. "Draw on! Smite down the gates, and tear these wicked ones limb from limb."

Then the women screamed aloud and battered on the gates with trees so that they fell. They fell, and the women rushed in madly. They seized the priests of Hathor, and tore them limb from limb, as dogs tear a wolf. Now the shrine stood before them.

"Touch not the doors," cried Meriamun. "Bring fire and burn the shrine with her who dwells therein. Touch not the doors, look not in the witch's face, but burn her, where she is, with fire."

Then the women brought the reeds and the wood and piled them around the shrine to twice the height of a man. They brought ladders, also, and piled the fuel upon the roof of the shrine till all was covered. And they poured pitch over the fuel; and then at the word of Meriamun they cast torches on the pitch and drew back, screaming. For a moment the torches smouldered, then suddenly, on every side, great tongues of flame leapt up to Heaven. Now the shrine was wrapt in fire and yet they cast fuel on it till none might draw near because of the heat. Now it burned as a furnace burns, and now the fire reached the fuel on the roof. It caught, and the shrine was but a sheet of raging flame that lit the white-walled city, and the broad face of Sihor, as the sun lights the lands. The alabaster walls of the shrine turned whiter yet with heat: they cracked and split till the fabric tottered to its fall.

"Now there is surely an end of the witch," cried Meriamun, and the women screamed an answer to her.

But even as they screamed a great tongue of flame shot out through the molten doors; ten fathoms length and more, it shot like a spear of fire. Full in its path stood a group of the burners. It struck them, it licked them up, and lo! they fell in blackened heaps upon the ground.

Rei looked down the path of the flame. There in the doorway, whence it had issued, stood the Golden Helen, wrapped round with fire, and the molten metal of the doors crept about her feet. There she stood in the heart of the fire, but there was no stain of fire on her, nor on her white robes, nor on her streaming hair; and even through the glow of the furnace he saw the light of the red star on her breast. The flame licked her form and face, it wrapped itself around her and curled through the masses of her hair. But still she stood unharmed while the burners shrank back amazed, all save Meriamun the Queen. And as she stood she sang wild and sweet, and the sound of her singing came through the roar of the flames and reached the ears of the women who, forgetting their rage, clung one to another in fear. Thus she sang—of Beauty, which men seek in all women and never find, and of the eternal war for her sake, between the women and the men, which is the great war of the world. And thus her song ended:

Will ye bring flame to burn my shrine
  Who am myself a flame,
Bring death to tame this charm of mine
  That death can never tame?
Will ye bring fire to harm my head
  Who am myself a fire,
Bring vengeance for your lovers dead
  Upon the World's Desire?
Nay, women, while the earth endures
  Your loves are not your own,
They love you not, these loves of yours,
  Helen they love alone!
My face they seek in every face,
  Mine eyes in yours they see,
They do but toy with you a space,
  And rise and follow me!

Then, still singing, she stepped forward from the shrine, and as she went the walls fell in, and the roof crashed down upon the ruin, and the flames shot into

the very sky. Helen heeded it not. She looked not back, but out to the gates beyond. She glanced not at the fierce blackened faces of the women, nor on the face of Meriamun, who stood before her, but slowly passed towards the gates. Nor did she go alone, for with her came a canopy of fire, hedging her round with flame that burned from nothing. The women saw the wonder and fell down in their fear, covering their eyes. Meriamun alone fell not, but she, too, must cover her eyes because of the glory of Helen and the fierceness of the flame that wrapped her round.

Now Helen ceased singing, but moved slowly through the courts till she came to the outer gates. Here, by the gates, was the chariot of Meriamun. Then Helen called aloud, and the Queen, who followed, heard her words:

"Rei," she cried, "draw nigh and have no fear. Draw nigh that I may pass with thee down that path the Wanderer treads. Draw nigh and let us swiftly hence, for the hero's last battle is at hand, and I would greet him ere he die."

Rei heard her and drew near, trembling, tearing from him the woman's weeds he wore, and showing the priest's garb beneath. And as he came the fire that wrapped her glory round left her and passed upward like a cloak of flame. She stretched out her hand to him saying:

"Lead me to yonder chariot, Rei, and let us hence."

Then he led her to the chariot, while those who stood by the chariot fled in fear. She mounted the chariot and he set himself beside her. Then he grasped the reins and called to the horses, and they bounded forward and were lost in the night.

But Meriamun cried in her wrath:

"The witch is gone; gone with my own servant whom she hath led astray. Bring chariots, and let horsemen come with the chariots, for where she passes there I will follow,—ay, to the end of the world and the coast of Death."

Chapter VII.

THE LAST FIGHT OF ODYSSEUS, LAERTES' SON.

On the very night of the burning of the shrine of Hathor, the host of Pharaoh marched forth from On to do battle with the Nine-bow barbarians. And before the host marched, the captains came to the Wanderer, according to the command of Pharaoh, and, placing their hands in his, swore to do his bidding on the march and in the battle. They brought him the great black Bow of Eurytus, and his keen sword of bronze, Euryalus's gift, and many a sheaf of arrows, and his heart rejoiced when he saw the goodly weapons. He took the bow and tried it, and as he drew the string, once again and for the last time it sang shrilly of death to be. The captains heard the Song of the Bow, though what it said the Wanderer knew alone, for to their ears it came but as a keen cry, like the cry of one who drowns in the water far from the kindly earth. But they marvelled much at the wonder, and said one to another that this man was no mortal, but a God come from the Underworld.

Then the Wanderer mounted the chariot of bronze that had been made ready for him, and gave the word to march.

All that night the host marched swiftly, and at daybreak they camped beneath the shelter of a long, low hill. But at the sunrise the Wanderer left the host, climbed the hill with certain of the captains, and looked forth. Before him was a great pass in the mountains, ten furlongs or more in length, and through it ran the road. The sides of the mountain sloped down to the road, and were strewn with rocks split by the sun, polished by the sand, and covered over with bush that grew sparsely like the hair on the limbs of a man. To the left of the mountains lay the River Sihor, but none might pass between the mountain and the river. The Wanderer descended from the hill and, while the soldiers ate, drove swiftly in his chariot to the further end of the pass and looked forth again. Here the river curved to the left, leaving a wide plain, and on the plain he saw the host of the Nine-bow barbarians, the mightiest host that ever his eyes had looked upon. They were encamped by nations, and of each nation there were twenty thousand men. And beyond the glittering camp of the barbarians he saw the curved ships of the Achæans. They were drawn upon the beach of the great river, as, many a year ago, he had seen them drawn up on the shore that is by Ilios. He looked upon plain and pass, on mountain and river, and measured the number of the foe. Then all his heart was filled with the lust of battle, and his warlike cunning awoke. For of all leaders of men he was the most skilled in the craft of battle, and he desired that this, his last war, should be the greatest war of all.

Turning his horses' heads, he galloped back to the host of Pharaoh, and mustered them in battle array. It was but a little number as against the number of the barbarians—twelve thousand spearmen, nine thousand archers, two thousand horsemen, and three hundred chariots. The Wanderer passed up and down their ranks bidding them be of good courage, for this day they should sweep the barbarians from the land.

As he spoke a hawk flew down from the right, and fell on a heron, and slew it in mid-air. The host shouted, for the Hawk is the Holy Bird of Ra; and the Wanderer, too, rejoiced in the omen. "Look, men," he cried, "the Bird of Ra has slain the wandering thief from the waters, and so shall ye smite the spoilers from the sea."

Then he held counsel with captains, and certain trusty men were sent out to the camp of the barbarians, and they were charged to give an ill report of the host of Pharaoh, and to say that such of it as remained awaited the barbarian onset behind the shelter of the hill on the further side of the pass.

Then the Wanderer summoned the captains of the archers, and bade them hide all their force among the rocks and thorns on either side of the mountain pass, and there to wait till he drew the hosts of the foe into the pass. And with the archers he sent a part of the spearmen, but all the chariots he hid beneath the shelter of the hill on the hither side of the pass.

Now, when the ambush was set and all were gone, save the horsemen only, his spies came in and told him that the host of the barbarians marched from their camp, but that the Achæans marched not, but stopped by the river to guard the camp and ships. Then the Wanderer bade the horsemen ride through the pass and stand in the plain beyond, and there await the foe. But when the hosts of the barbarians charged them, they must reel before the charge, and at length fly headlong down the pass as though in fear. And he

himself would lead the flight in his chariot, and where he led there they should follow.

So the horsemen rode through the pass and formed their squadrons on the plain beyond. Now the foe drew nigh, and a glorious sight it was to see the midday sun sparkling on their countless spears. Of horsemen they had no great number, but there were many chariots and swordsmen, and spearmen and slingers beyond count. They came on by nations; and in the centre of the host of each nation sat the king of the nation, in a glorious chariot, with girls and eunuchs holding fans to fan him with, and awnings of silk to hide him from the sun.

Now the Wanderer hung back behind the squadrons of horsemen as though in fear. But presently he sent messengers bidding the captains of the squadrons to charge the first nation, and fight for a while, but feebly, and then, when they saw him, turn his horses and gallop through the pass, to follow after him as though in doubt, but in such fashion as to draw the foe upon their heels.

This the captains of the Mercenaries did. Once they charged and were beaten back; then they charged again, but the men made as though they feared the onset. Now the foe came hard after them, and the Wanderer turned his chariot and fled through the pass, followed slowly by the horsemen. And when the hosts of the barbarians saw them turn they set up a mighty shout of laughter that rent the skies, and charged after them.

But the Wanderer looked back and laughed also. Now he was through the pass, followed by the horsemen, and after them swept the host of the barbarians like a river that has burst its banks. Still the Wanderer held his hand till the whole pass was choked with the thousands of the foe, ay, until the half of the first of the nations had passed into the narrow plain that lay between the hill and the mouth of the pass. Then, driving apace up the hill, he stood in his chariot and gave the signal. Lifting his golden shield on high he flashed it thrice, and all the horsemen shouted aloud. At the first flash, behold from behind every rock and bush of the mountain sides arose the helms of armed men. At the second flash there came a rattling sound of shaken quivers, and at the third flash of the golden shield the air was darkened with the flight of arrows. As the sea birds on a lonely isle awake at the cry of the sailor and wheel by thousands from their lofty cliffs, so at the third flash of the Wanderer's shield the arrows of his hidden host rushed downward on the foe, rattling like hail upon their harness. For a while they kept their ranks, and pressed on over the bodies of those that fell. But soon the horses in the chariots, maddened with wounds, plunged this way and that, breaking their ranks and trampling the soldiers down. Now some strove to fly forward and some were fain to fly back, and many an empty chariot was dragged this way and that, but ever the pitiless rain of shafts poured down and men fell by thousands beneath the gale of death. Now the mighty host of the Nine Bows rolled back, thinned and shattered, towards the plain, and now the Wanderer cried the word of onset to the horsemen and to the chariots that drew from behind the shelter of the hill, and following after him they charged down upon those barbarians who had passed the ambush, singing the song of Pentaur as they charged. Among those nigh the mouth of the pass was the king of the nation of the Libu, a great man, black and terrible to see. The Wanderer drew his bow, the arrow rushed forth and pierced the king, and he fell dead in his chariot. Then those of his host who had passed the ambush turned to fly, but the chariot of the Wanderer

dashed into them,and after the chariot came the horsemen, and after the horsemen the chariots of Pharaoh.

Now all who were left of the broken host rolled back, mad with fear, while the spearmen of Pharaoh galled them as hunters gall a flying bull, and the horsemen of Pharaoh trampled them beneath their feet.

Red slaughter raged all down the pass; helms, banners, arrow-points shone and fell in the stream of the tide of war, but at length the stony way was clear save for the dead alone. Beyond the pass the plain was black with flying men, and the fragments of the broken nations were mixed together as clay and sand are mixed of the potter. Where, now, were the hosts of the Nine-bow barbarians? Where, now, was their glory and their pride?

The Wanderer gathered his footmen and his chariots and set them in array again, but the horsemen he sent out to smite the flying nations and wait his coming by the camp. For there were mustering those who were left of the nations, perchance twenty thousand men, and before their ships were ranged the dense ranks of the Achæans, shield to shield, every man in his place.

The Wanderer led his host slowly across the sandy plain, till at length he halted it two bowshots from the camp of the barbarians. The camp was shaped like a bow, and the River Sihor formed its string,and round it was a deep ditch, and beyond the ditch a wall of clay. Moreover, within the camp, and nearer to the shore, there was a second ditch and wall, and behind it were the beaks of the ships and the host of Aquaiuasha, even of his own dear people, the Achæans. There were the old blazons and the spears that had fought below Troy town. There were the two lions of Mycenæ, the Centaur of the son of Polypætas, son of Pirithous; there were the swan of Lacedæmon and the Bull of the kings of Crete, the Rose of Rhodes, the Serpent of Athens, and many another knightly bearing of old friends and kindred dear. And now they were the blazons of foemen, and the Wanderer warred for a strange king, and for his own hand, beneath the wings of the Hawk of the Legion of Ra.

The Wanderer sent heralds forward, calling to those barbarians who swarmed behind the wall to surrender to the host of Pharaoh, but, being entrenched by the River Sihor, they would in nowise do. For they were mad because of their slaughtered thousands, and, moreover, they knew that it is better to die than to live as slaves. This they saw also, that their host was still as strong as the host of Pharaoh, which was without the wall, and weary with the heat and stress of battle and the toil of marching through the desert sands. Now the captains of the host of Pharaoh came to the Wanderer praying him that he would do no more battle on that day, because the men were weary and the horses neighed for food and water.

But he answered them: "I swore to Pharaoh that I would utterly smite the people of the Nine Bows and drive them down to death so that the coasts of Khem may be free of them. Here I may not camp the host, without food or pasture for the horses, and if I go back the foe will gather heart and come on, and with them the fleet of the Achæans, and no more shall we lure them into ambush, for therein they have learned a lesson. Nay, get you to your companies. I will go up against the camp."

Then they bowed and went, for having seen his deeds, and his skill and craft in war, they held him the first of captains, and dared not say him nay.

So the Wanderer divided his host into three parts, set it in order of battle, and moved up against the camp. But he himself went with the centre part

against the gate of the camp, for here there was an earthen way for chariots, if but the great gates might be passed. And at a word the threefold host rushed on to the charge. But those within the walls shot them with spears and arrows so that many were slain and they were rolled back from the wall as a wave is rolled from the cliff. Again the Wanderer bade them charge on the right and left, bearing the dead before them as shields, and hurling corpses into the ditch to fill it. But he himself hung back awhile with the middle army, watching how the battle went, and waiting till the foe at the gate should be drawn away.

Now the Mercenaries of Pharaoh forced a passage on the right, and thither went many barbarians who watched the gate that they might drive them back.

Then the Wanderer bade men take out the poles of the chariots and follow him and beat down the gates with the poles. This, with much toil and loss, they did, for the archers poured their arrows on the assailants of the gate. Now at length the gates were down, and the Wanderer rushed through them with his chariot. But even as he passed the Mercenaries of Pharaoh were driven out from the camp on the right, and those who led the left attack fled also. The soldiers who should have followed the Wanderer saw and wavered a little moment, and while they wavered the companies of the barbarians poured into the gateway and held it so that none might pass. Now the Wanderer was left alone within the camp and back he might not go. But fear came not nigh him; nay, the joy of battle filled his mighty heart. He cast his shield upon the brazen floor of the chariot, and cried aloud to the charioteer, as he loosened the long grey shafts in his quiver:

"Drive on, thou charioteer! Drive on! The jackals leave the lion in the toils. Drive on! Drive on! and win a glorious death, for thus should Odysseus die."

So the charioteer, praying to his Gods, lashed the horses with his scourge, and they sprang forward madly among the foe. And as they rushed, the great Bow rang and sang the swallow string—rang the bow and sang the string, and the lean shaft drank the blood of a leader of men. Again the string sang, again the shaft sped forth, and a barbarian king fell from his chariot as a diver plunges into the sea, and his teeth bit the sand.

"Dive deep, thou sea-thief!" cried the Wanderer; "thou mayest find treasures there! Drive on, thou charioteer, so should lions die while jackals watch."

Now the barbarians looked on the Wanderer and were amazed. For ever his chariot rushed to and fro across the mustering ground of the camp, and ever his grey shafts carried death before them, and ever the foemen's arrows fell blunted from his golden harness. They looked on him amazed, they cried aloud that this was the God of War come down to do battle for Khem, that it was Sutek the splendid, that it was Baal in his strength; they fled amain before his glory and his might. For the Wanderer raged among them like great Rameses Miamun among the tribes of the Khita, like Monthu, the Lord of Battles, and lo! they fled before him, their knees gave way, their hearts were turned to water, and he drove them as a herdsman drives the yearling calves.

But now at length a stone from a sling smote the charioteer who directed the chariot, and sank in between his eyes, so that he fell down dead from the chariot. Then the reins flew wide and the horses rushed this way and that, having no master. And now a spear pierced the heart of the horse on the right so that he fell, and the pole of the chariot snapped in two. Then the barbarians took heart and turned, and some of them set on to seize the body of the

charioteer, and spoil his arms. But the Wanderer leaped down and bestrode the corpse with shield up, and spear aloft. A warrior of the Shardana cast a spear at him, but he avoided it, and answered with his own that passed between the chin and the throat, and the bronze stood out behind the warrior's head. Before he could drag forth the spear another barbarian, a black man, had smitten at his helm and brought him to his knee, but he drew the short sword of Euryalus as he staggered to his feet, and at the blow he dealt on that man's neck the head flew, but the short sword broke at the handle, for it might not bear the stroke. Now, it chanced that in the place where they fought was the ruin of a temple, old and decayed before King Mena's day. The Wanderer stumbled with the weight of his own blow, his foot had struck a stone of that old temple. It was the marble head of an image of a god or man—of a man long nameless or a forgotten God. The Wanderer lifted it; it was a weight for a chariot, and cast it at those who stood before him in the fray. The white stone hurtled through the air, and one man got his death from that stroke, and another was sore crushed, and so terrible was the cast that the rest drew back in fear. But the Wanderer stood there unarmed and laughed like a God!

Chapter VIII.

"TILL ODYSSEUS COME!"

THE Wanderer laughed like a God, though he deemed that the end was near; and the foes within the camp and the friends without looked on him and wondered.

"Slay him!" cried the foes within, speaking in many tongues. "Slay him!" they cried, and yet they feared the task, but circled round like hounds about a mighty boar at bay.

"Spare him!" shouted the host of the Achæans, watching the fray from afar, as they stood behind their inner wall, for, as yet, they had not mingled in the battle, but stayed by their ships to guard them.

"Rescue him," cried the captains of Pharaoh without, but none came on to force the way.

Then, of a sudden, as Fate hung upon the turn, a great cry of fear and wonder rose from the ranks of Pharaoh's host beyond the wall. It swelled and swelled till at length the cry took the sound of a name—the sound of the name of *Hathor*.

"The Hathor! The Hathor! See, the Hathor comes!"

The Wanderer turned his head and looked swiftly. A golden chariot sped down the slope of sand, towards the gate of the camp. The milk-white horses were stained with sweat and splashed with blood. They thundered on towards the gate down the way that was red with blood, as the horses of the dawn rush through the blood-red sky. A little man, withered and old, drove the chariot, leaning forward as he drove; and by his side stood the Golden Helen. The Red Star blazed upon her breast; her hair and filmy robes floated on the wind.

She looked up and forth. Now she saw him, Odysseus of Ithaca, her love alone, beset with foes, and a cry broke from her. She tore away the veil that

hid her face, and her beauty flashed out upon the sight of men as the moon flashes from the evening mists. She pointed to the gate, she stretched out her arms towards the host of Pharaoh, bidding them look upon her and follow her.

Then a shout went up from the host, and they rushed onwards in the path of the chariot, for where the Helen leads there men must follow, through Life to Death, through War to Peace.

On the chariot rushed to the gate of the camp, and after it the host of Pharaoh followed. The holders of the gate saw the beauty of her who rode in the chariot; they cried aloud in many tongues that the Goddess of Love had come to save the God of War. They fled this way and that, or stood, drunken with the sight of beauty, and were dashed down by the horses and crushed of the chariot wheels. Now she had passed the gates, and after her poured the host of Pharaoh; now Rei reined up the horses by the broken chariot of the Wanderer and now the Wanderer, with a shout of joy, had sprung into the chariot of Helen.

"And art thou come to be with me in my last battle?" he whispered in her ear. "Art thou indeed that Argive Helen whom I love? or am I drunk with the blood of men, and blind with the sheen of spears, and is this the vision of a man doomed to die?"

"It is no vision, Odysseus, for I am Helen's self," she answered gently. "I have learned all the truth, and knowing thy fault count it but a little thing. Yet, because thou didst forget the words of the immortal Goddess who, being my foe now and for ever, set this cunning snare for thee, the doom is on thee, that Helen shall not be thine in this space of life. For thou fightest in thy last battle, Odysseus. On! See thy hosts clamour to be led, and there the foe hangs black as storm, and shoots out the lightning of his spears. On! Odysseus, on! that the doom may be accomplished and the word of the ghost fulfilled!"

Then the Wanderer turned and called to the captains, and the captains called to the soldiers and set them in array, and following the blood-red Star they rolled down upon the gathered foe. They rolled down upon the foe as the swift tide rolls upon the rocks when the breath of the gale is strong; and as the waters leap and gather till the rocks are lost in the surge, so the host of Pharaoh leapt upon the foe and swallowed them up. And ever in the forefront of the war blazed the Red Star on Helen's breast, and ever the sound of her singing pierced the din of death.

Now the host of the Nine-bow barbarians was utterly destroyed, and the host of Pharaoh came up against the wall that was set about the camp of the Achæans to guard their ships, and at its head came the golden chariot wherein were the Wanderer and Helen. The captains of the Achæans looked wondering from their wall, watching the slaughter of their allies.

"Now, who is this," cried a captain, "who is clad in golden armour, fashioned like our own, and who leads the host of Pharaoh to victory?"

Then a certain aged leader of men looked forth and answered: "Such armour I have known indeed, and such a man once wore it. The armour is fashioned like the armour of Paris, Priam's son—Paris of Ilios;—but Paris hath long been dead."

"And who is she?" cried the captain; "she on whose breast a red star burns, who rides in the chariot of him with the golden armour, whose shape is the shape of beauty, and who sings aloud while men go down to death?"

Then the aged leader of men looked forth again and answered: "Such a

one I have known, indeed ; so she was wont to sing, and hers was such a shape of beauty, and such a star shone ever on her breast—Helen of Ilios—Argive Helen it was who wore it—Helen because of whose loveliness the world grew dark with death ;—but long is Helen dead."

Now the Wanderer glanced from his chariot and saw the crests of the Achæans and the devices on the shields of men, with whose fathers he had fought beneath the walls of Ilios. He saw, and his heart was stirred within him, so that he wept there in the chariot.

"Alas ! for the fate that is on me," he cried, "that I must make my last battle in the service of a stranger, against my own people and the children of my own dear friends."

"Weep not, Odysseus," said Helen, "for Fate drives thee on : Fate that is cruel and changeless, and heeds not the loves or hates of men. Weep not, Odysseus, but go on up against the Achæans, for from among them thy death comes."

So the Wanderer went on, sick at heart, shooting no shafts, and striking no blow; and after him came the remnant of the host of Pharaoh. Then he halted the host, and at his bidding Rei drove slowly down the wall seeking a place to storm it, and as he drove they shot at the chariot from the wall with spears and slings and arrows. But not yet was the Wanderer doomed. He took no hurt, nor did any hurt come to Rei, nor to the horses that drew the chariot ; and as for Helen, the shafts of Death knew her and turned aside. Now, while they drove thus, Rei told the Wanderer of the death of Pharaoh, of the burning of the temple of Hathor, and of the flight of Helen. The Wanderer hearkened and said but one thing, for in all this he saw the hand of Fate :

"It is time to make an end, Rei, for soon will Meriamun be seeking us, and methinks that I have left a trail that she can follow." And he nodded at the piled-up dead that stretched further than the eye could reach.

Now they were come over against that spot in the wall where stood the aged captain of the Achæans who had likened the armour of the Wanderer to the armour of Paris, and the beauty of her at his side to the beauty of Argive Helen.

The captain loosed his bow at the chariot and leaning forward watched the flight of the shaft. It rushed straight at Helen's breast,then of a sudden turned aside, harming her not. And as he marvelled she lifted her face and looked towards him. Then he saw and knew her for that Helen whom he had seen while he served with Cretan Idomeneus and in the Argive ships, when the Leaguer was done and the smoke went up from burning Ilios.

Again he looked, and lo ! on the Wanderer's golden shield he saw the White Bull, the device of Paris, son of Priam, as ofttimes he had seen it glitter on the walls of Troy. Then great fear took him and he lifted up his hands and cried aloud :

"Fly, ye Achæans ! Fly ! Back to your curved ships and away from this accursed land ! For yonder in the chariot stands Argive Helen, who is long dead, and with her Paris, son of Priam, come to wreak the woes of Ilios on the sons of those who wasted her. Fly ere the curse smite you."

Then a great cry of fear rose from the host of the Achæans, as company called to company that the ghosts of Paris of Ilios and Argive Helen led the armies of Pharaoh on to victory. A moment they gazed as frightened sheep

gaze upon the creeping wolves, then turning from the wall they rushed headlong to the ships.

Behind them came the soldiers of Pharaoh, storming the wall and tearing at their flanks as wolves tear the flying sheep. Then the Achæans turned at bay, and a mighty fray raged round the ships, and the knees of many were loosened. And of the ships some were burned and some were left upon the bank. But a remnant of them were pushed off into the deep water and hung there on their oars, waiting the end of the fray.

Now the sun was gone down, so that men could scarce see to slay each other. The Wanderer stood in his chariot on the bank, watching the battle, for he was weary, and had little mind to swell the slaughter of the people of his own land.

Now the last ship was pushed off, and at length the great battle was done. But among those on the ship was a man still young, and the goodliest and mightiest among all the host of the Achæans. By his own strength and valour he had held the Egyptians back while his comrades ran the curved ship down the beach; and the Wanderer, looking on him, deemed him their hardiest warrior and most worthy of the Achæans.

He stood upon the poop of the ship, and saw the setting rays of sunlight gleam on the Wanderer's golden helm. Then of a sudden he drew a mighty bow and loosed an arrow charged with death.

"This gift to the Ghost of Paris, from Telegonus, son of Circe, and of Odysseus, who was Paris's foe," he cried, with a loud voice.

And as he cried it, and as the fateful words struck on the ears of Odysseus and the ears of Helen, the shaft, pointed by the Gods, rushed on. It rushed on, it smote the Wanderer with a deadly wound where the golden body-plate of his harness joined the taslets, and pierced him through. Then he knew that his fate was accomplished and that Death came upon him from the water, as the ghost of Tiresias in Hades had foretold. In his pain, for the last time of all, he let fall his shield and the black Bow of Eurytus. With one hand he clasped the rail of the chariot, and the other he threw about the neck of the Golden Helen, who bent beneath his weight like a lily before the storm. Then he also cried aloud in answer:

"O Telegonus, son of Circe, what wickedness hast thou wrought before the awful Gods that this curse should have been laid upon thee to slay him who begat thee? Hearken, thou son of Circe, I am not Paris. I am Odysseus, of Ithaca, who begat thee, and thou hast brought my death upon me from the water, as the ghost foretold."

When Telegonus heard these words, and knew that he had slain his father, the famed Odysseus, whom he had sought the whole world through, he would have cast himself into the river, there to drown, but those with him held him by strength, and the stream took the curved ship and floated it away. And thus for the first and last time did the Gods give it to Telegonus to look upon the face and hear the voice of his father, Odysseus.

But when the Achæans knew that it was the lost Odysseus who had led the host of Pharaoh against the armies of the Nine Nations, they wondered no more at the skill of the ambush and the greatness of the victory of Pharaoh.

. . . . . .

Now the chariots of Meriamun were pursuing, and they splashed through the blood of men in the pass, and rolled over the bodies of men in the plain

beyond the pass. They came to the camps and found them peopled with dead, and lit with the lights of the blazing ships of the Aquaiuasha. Then Meriamun cried aloud :

"Surely Pharaoh grew wise before he died, for there is but one man on the earth who with so small a force could have won so great a fray. He hath saved the crown of Khem, and, by Osiris, he shall wear it."

Now the chariots of Meriamun had passed the camp of the barbarians, and were come to the inner camp of the Achæans, and the soldiers shouted as she came driving furiously.

The Wanderer lay dying on the ground, there by the river bank, and the light of the burning ships flamed on his golden armour, and on the Star at Helen's breast.

"Why do the soldiers shout?" he asked, lifting his head from Helen's breast.

"They shout because Meriamun the Queen is come," Rei answered.

"Let her come," said the Wanderer.

Now Meriamun sprang from her chariot and walked through the soldiers, who made way, bowing before her Royalty, to where the Wanderer lay, and stood speechless looking on him.

But the Wanderer, lifting his head, spake faintly :

"Hail, O Queen!" he said. "I have accomplished the charge that Pharaoh laid upon me. The host of the Nine-bow barbarians is utterly destroyed ; the fleet of the Aquaiuasha is burned, or fled ; the land of Khem is free from foes. Where is Pharaoh that I may make report to him ere I die?"

"Pharaoh is dead, Odysseus," she answered. "Oh, live on ! live on ! and thyself thou shalt be Pharaoh."

"Ay, Meriamun the Queen," answered the Wanderer, "I know all. Pharaoh is dead ! Thou didst slay Pharaoh, thinking thus to win for thy Lord me, who am won of Death. Heavily shall the blood of Pharaoh lie upon thee in that land whither I go, Meriamun, and whither thou must follow swiftly. Thou didst slay Pharaoh ; and Helen, who through thy guile is lost to me, thou wouldst have slain also but thou couldst not harm her immortality. And now I die, and this is the end of all these Loves and Wars and Wanderings. My death has come upon me from the water."

Meriamun stood speechless, for her heart was torn in two so that in her grief she forgot even her rage against Helen and Rei the Priest.

Then Helen spoke. "Thou diest, indeed, Odysseus, yet it is but for a little time, for thou shalt come again and find me waiting."

"Ay, Odysseus," said the Queen, "and I also will come again and thou shalt love me then. Oh, now the future opens and I know the things that are to be. Beneath the wings of Truth shall we meet again, Odysseus."

"There shall we meet again, Odysseus, and there thou shalt draw the Veil of Truth," said Helen.

"Yea," quoth the dying Wanderer, "there or otherwise shall we meet again, and there or otherwise shall love and hate, shall lose and win and die to re-arise again. But not yet is the struggle ended that began in other worlds than this, and shall endure till evil is lost in good, and darkness swallowed up in light. Bethink thee, Meriamun, of that vision of thy bridal night, and read its riddle. Lo ! I will answer it with my last breath as the Gods have given me wisdom. When we three are once more twain, then shall our sin be purged and peace be

won, and the veil be drawn from the face of Truth. Oh, Helen, fare thee well! I have sinned against thee, I have sworn by the Snake who should have sworn by the Star, and therefore I have lost thee."

"Thou hast but lost to find again beyond the Gateways of the West," she answered low.

Then she bent down, and taking him in her arms, kissed him, whispering in his ear, and the blood of men that fell ever from the Star upon her breast dropped like dew upon his brow and vanished as it dropped.

And as she whispered of joy to be, and things too holy to be written, the face of the Wanderer grew bright, like the face of a God.

Then suddenly his head fell back, and he was dead upon the heart of the World's Desire.

For thus was fulfilled the oath of Idalian Aphrodite, and thus, at the last, did Odysseus lie in the arms of the Golden Helen.

Now Meriamun clasped her breast and her lips turned white with pain. But Helen rose, and standing at the Wanderer's head looked on Meriamun, who stood at his feet.

"Thou foolish sister," said Helen to the Queen. "See, now, the end of all. He whom we loved is lost to us, and what hast thou gained? Nay, look not so fiercely on me. I may not be harmed of thee, as thou hast seen, and thou mayest not be harmed of me, who would harm none, though ever thou wilt hate me who hate thee not, and till thou learnest to love me, Sin shall be thy portion and Bitterness thy comfort."

But Meriamun made no answer.

Then Helen beckoned to Rei and spake to him, and Rei went, weeping, to do her bidding.

Presently he returned again and with him were soldiers bearing torches. The soldiers lifted up the body of the Wanderer and bore it to a mighty pyre that was built up of the wealth of the barbarians, of chariots, spears, and the oars of ships, of wondrous fabrics and costly furniture. And they laid the Wanderer on the pyre, and on his breast they laid the black Bow of Eurytus.

Then Helen spoke to Rei once more, and Rei took a torch and fired the pyre so that smoke and flame burst from it. And all the while Meriamun stood by as one who dreams.

Now the great pyre was a mass of flame, and the golden armour of the Wanderer shone through the flame, and the black Bow twisted and crumbled in the heap. Then, of a sudden, Meriamun gave a great cry, and tearing the Snake-girdle from her middle hurled it on the flames.

"From Fire thou camest, thou Ancient Evil," she said in a dead tongue, "to Fire get thee back again, false counsellor."

But Rei the Priest called aloud in the same tongue:

"An ill deed thou hast done, O Queen, for thou hast taken the Snake to thy bosom, and where the Snake passes there thou must follow."

Even as he spoke the face of Meriamun grew fixed, and she was slowly drawn towards the fire, as though by invisible hands. Now she was on its very brink, and now with one loud wail she plunged into it and cast herself at length on the body of the Wanderer.

And as she lay there on the body, behold, the Snake awoke in the fire. It awoke, it grew, it twined itself about the body of Meriamun and the body of the Wanderer, and lifting its head it laughed.

Then the fire fell in, and the Wanderer and Meriamun the Queen, and the Snake that wrapped them round, vanished in the heart of the flames.

For a while the Golden Helen stood still looking on the dying flames. Then she let her veil fall, and turning, wandered forth into the desert and the night, singing as she passed.

And so she goes, wandering, wandering, till Odysseus come again.

. . . . . .

Now this is the tale that I, Rei the Priest, have been bidden to set forth before I lay me down to sleep in my splendid tomb that I have made ready by Thebes. Let every man read it as he will, and every woman as the Gods have given her wit.

FINIS.

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* * *The Editor of this Review does not undertake to return any Manuscripts.*